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PROCEEDINGS
OF THE
TWENTY-SECOND ANNUAL MEETING
MICHIGAN
—**GAS**—
ASSOCIATION



DETROIT, MICHIGAN

SEPTEMBER 17, 18 AND 19
1913

MICHIGAN
GAS ASSOCIATION

Proceedings of the Twenty-second
Annual Meeting

SEPTEMBER 17, 18, 19, 1913

: : Hotel Ponchartrain : :

DETROIT, MICHIGAN

OFFICERS

Warren S. Blauvelt, *President*, - - - Detroit

Henry W. Douglas, *Vice President*, - - Ann Arbor

Glenn R. Chamberlain, *Sec'y-Treas.*, Grand Rapids

Frank W. Blowers, *Member Ex. Committee*, Kalamazoo

Organized at Kalamazoo, Michigan, 1893

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PAST PRESIDENTS.

Sedgwick Dean,	B. C. Cobb,
Wm. M. Eaton,	S. E. Wolff,
C. H. Raynor,	E. F. Lloyd,
Henry H. Hyde,	Wm. H. Barthold,
Henry D. Walbridge,	V. F. Dewey,
Henry W. Douglas,	D. H. Frazer,
L. E. Walker,	Jas. T. Lynn,
Paul Doty,	B. O. Tippy,
John J. Knight,	A. P. Ewing,
	Frank W. Blowers.

MICHIGAN GAS ASSOCIATION MEETINGS.

First (organized)	1893	Kalamazoo.
Second	1894	Grand Rapids.
Third	1895	Saginaw.
Fourth	1896	Jackson.
Fifth	1897	Ann Arbor.
Sixth	1898	Port Huron.
Seventh	1899	Lansing.
Eighth	1900	Detroit.
Ninth	1901	Grand Rapids.
Tenth	1902	Kalamazoo
Eleventh	1903	Battle Creek
Twelfth	1904	Saginaw.
Thirteenth	1905	Jackson.
Fourteenth	1905	Detroit.
Fifteenth	1906	Grand Rapids.
Sixteenth	1907	Battle Creek.
Seventeenth	1908	Kalamazoo.
Eighteenth	1909	Aboard Boat, "Soo."
Nineteenth	1910	Aboard Boat Georgian Bay.
Twentieth	1911	Detroit.
Twenty-first	1912	Toronto, Thousand Islands.
Twenty-second	1913	Detroit.

WORK DONE BY HOLDERS OF MICHIGAN GAS ASSOCIATION FELLOWSHIP AT THE UNIVERSITY OF MICHIGAN.

Herman Russell, '00-'01—Relation of Heating and Illuminating values of Gases, Especially as Applied to Incandescent Mantles.

A. F. Traver, '01-'02—The Theory of the Incandescent Mantle.

M. E. Mueller, '02-'03—Loss of Illuminating Power of Mantles While Burning.

Samuel Ball, '03-'04—1st paper, Removal of Naphthalene from Coal Gas.

David H. Clary, '04-'05—2nd paper, Removal of Naphthalene from Coal Gas.

Joel M. Barnes, '05-'06—3rd paper, Removal of Naphthalene from Coal Gas.

Fred E. Park, '06-'07—1st paper, Studies in the Manufacture of Coal Gas.

John H. Wyman, '07-'08—2nd paper, Studies in the Manufacture of Coal Gas.

Wm. A. Dunkley, '08-'09—Destructive Distillation of Coal at Low Temperatures.

B. M. Ferguson, '09-'10—Constants and Variables in the Destructive Distillation of Coal.

R. S. Tour, '10-'11—The Function of Tar in the Condensation of Coal Gas.

J. W. Hacker, '11-'12—The Electric Separation of Tar from Coal Gas.

R. B. Rowley '12—'13—Continuance of Work on Electrical Separation of Tar from Coal Gas, and Testing Weathered Coal.

PROCEEDINGS

Twenty-second Annual Meeting of the Michigan Gas Association

Wednesday morning, September 17, 1913

The Twenty-second nnual Meeting of the Michigan Gas Association, held at Hotel Pontchartrain, Detroit, Michigan, September 17, 18 and 19, 1913, was called to order Wednesday morning at ten thirty a. m. by the President, Warren S. Blauvelt.

THE PRESIDENT: As the members are being registered it will be unnecessary to have a roll call. The next on the order of business is the reading of the minutes. As you all have printed copies of the Proceedings of the last meeting, we will dispense with the reading of the minutes also unless there is some objection.

THE PRESIDENT: The next on the order of business is the report of the Executive Committee. The Secretary will read the report.

Secretary Chamberlain then read the report of the Executive Committee as follows:

REPORT OF EXECUTIVE COMMITTEE.

A meeting of the Executive Committee was held in Detroit November 2, 1912, with all members present—Messrs. Blauvelt, Douglas, Blowers and Chamberlain. Plans for this annual meeting were discussed and an Entertainment Committee appointed, consisting of Alonzo P. Ewing, Chairman, A. L. Wilkinson, Wl S. Guitteau and Harry D. Schall, who are responsible for an excellent program.

NEW MEMBERS.

We submit with pleasure the following names for membership and recommend your favorable action thereon:

For Active Membership:

A. Allen, Supt. Station B, Detroit City Gas Company, Detroit, Mich.

E. C. Campbell, Manager, Benton Harbor & St. Jos. Gas & Fuel Co., Benton Harbor, Mich.

Lee Chamberlain, Industrial Salesman, Detroit City Gas Company, Detroit, Mich.

Johnson Collins, Supt. Station A, Detroit City Gas Company, Detroit, Mich.

W. G. Collins, Asst. Manager, Marshall Gas Co., Marshall, Mich.

H. F. Donahue, Supt. Cadillac Gas Company, Cadillac, Mich.

E. L. Dooling, Mutual Gas Company, St. Johns, Mich.

I. W. Durfee, 38 South Dearborn St., Chicago, Ill.

C. D. Dyer, Jr., Semet-Solvay Company, Detroit, Mich.

R. E. Eddy, Accountant, Kalamazoo Gas Company, Kalamazoo, Mich.

T. R. Elcock, Adv. Manager, United Gas Improvement Co., Broad & Arch Sts., Philadelphia, Pa.

Chas. R. Remington, Chemist, Washtenaw Gas Company, Ann Arbor, Mich.

Jno. C. Hicks, Mutual Gas Company, St. Johns, Mich.

E. F. Hutchins, Supt. Distr., Flint Gas Company, Flint, Mich.

Wm. H. Kratzen, Salesman, Detroit City Gas Company, Detroit, Mich.

Walter J. McMillen, New Business Mgr., Bay City Gas Company, Bay City, Mich.

Jno. H. Peterson, New Business Manager, Menominee and Marinette Light & Traction Co., Menominee, Mich.

E. G. Pratt, Manager & Cons. Eng., 627 Peoples Gas Bldg., Chicago, Ill.

Fred A. Richards, Supt. Flint Gas Company, Flint, Mich.

R. B. Rowley, Semet-Solvay Co., 461 Artillery Ave., Detroit, Mich.

E. W. Shaw, Secretary, Kalamazoo Gas Company, Kalamazoo, Mich.

J. E. Spindle, Chemist, Grand Rapids Gas Light Company, Grand Rapids, Mich.

H. C. Sterling, Manager, Three Rivers Gas Company, Three Rivers, Mich.

Harry W. White, New Business Manager, Kalamazoo Gas Co., Kalamazoo, Mich.

R. Wiseman, Hillsdale Gas Company, Hillsdale, Mich.

For Associate Membership:

Jos. J. Beaman, Salesman & Engineer, Industrial Furnace Co., 671-673 Atwater St., E. Detroit.

F. V. Coolahan, Salesman, Lindsey Light Company, 161 E. Indiana St.

James DeWolfe, D. S. Agent, Pittsburgh Coal Co., 1124 Majestic Bldg., Detroit, Mich.

W. R. Flattery, Salesman, Humphrey Company, Kalamazoo, Mich.

F. S. Fugate, Illuminating Eng., General Gas Light Co., Kalamazoo, Mich.

Wm. W. Hackney, Western Gas Construction Co., Fort Wayne, Ind.

F. N. Hamerstrom, Welsbach Co., Gloucester, N. J.

H. H. Hegeman, Salesman, The Kelly & Jones Co., 155 North Clark St., Chicago, Ill.

John Jennings, Salesman, Welsbach Company, Chicago, Ill.

Fenton P. Kelsey, Editor, Gas Record, Monadnock Block,

Chicago, Ill.

Lee B. Mettler, Western Sales Manager, Pittsburg Water Heater Co., 1105 Peoples Gas Bldg., Chicago.

Herbert Senger, Salesman, Consolidated Gas Purification & Chemical Co., 101 Park Ave., N. Y. City.

Chas. S. Smith, Salesman, Ringen Stove Co., St. Louis, Mo.

We also recommend that the following resignations be accepted:

N. L. Abrahams, 86 Spring St., Detroit, Mich.

Howard Bixby, Red Wing Gas & Elec. Co., Red Wing, Minn.

Thos. E. Bullion, Humphrey Company, Kalamazoo, Mich.

B. M. Ferguson, Asst. Chemist, Detroit City Gas Company.

Jas. L. Geddes, Mgr., Kelly Motor Truck Co., Springfield, O.

Alfred Grove, Salesman, Kelly & Jones Co., Chicago, Ill.

H. F. Hicks, Ruud Mfg. Co., Detroit, Mich.

W. W. Johnson, Niles Gas Co., Niles, Mich.

J. Albion Johnson, Humphrey Co., Kalamazoo, Mich.

J. N. McCallum, 822 Ford Bldg., Detroit, Mich.

E. V. Morgan, Gen'l Mgr., The Purimachos Works, Buffalo, N. Y.

W. M. Moran, Adrian Gas Co., Adrian, Mich.

Arthur Murray, Kelly Motor Truck Co., Springfield, O.

Joseph A. Sloan,

Don P. Snooks, Salesman, General Gas Light Co., Kalamazoo, Mich.

O. H. Sugden, Salesman, Purimachos Works, Buffalo, N. Y.

Chas. E. Swanson, Grand Rapids Gas Light Company.

John G. Taylor, Rathbone-Sard & Co., Detroit, Mich.

Spencer S. Weart, Gen'l Manager, Sun Vapor & Gas St. Lt. Co., Canton, O.

N. A. Young, Mgr., Jas. Gardner Jr. Co., Boliver, Pa

We further recommend dropping from our membership roll the following for non-payment of dues:

Wm. F. Doelker, Manager, N. B. D. Mt. Clemens Gas Co., Mt. Clemens, Mich.

John Doorenbos, Clinton & Banks Sts., Kalamazoo, Mich.

W. M. Nelson, 328 Ford Bldg., Detroit, Mich.

A. C. Runyan, So. Haven Gas Co., So. Haven, Mich.

S. VanOstrend, Sec'y, Light, Fuel & Power Co., So. Haven, Mich.

John L. West, Houghton Co. Gas & Coke Co., Hancock, Mich.

On motion of Mr. Ewing, duly seconded, the Executive Committee's report was accepted and the Secretary was instructed to cast a ballot of the Association admitting the applicants to membership. These new members were asked to rise so that the Association might know just who they were at sight.

THE PRESIDENT: We will next listen to the report of the Secretary and Treasurer:

MICHIGAN GAS ASSOCIATION
Secretary & Treasurer's Report 1912 *Boat Trip.*
September 2, 1913

RECEIPTS

Received Cash 120 Tickets at \$25.00	\$3,000.00
17 Tickets at 35.00	595.00
2 Parlor Tickets	85.00
Special Tickets	100.00
<hr/>	
Total Receipts	\$3,780.00
	\$3,780.00

DISBURSEMENTS

Paid Richelieu & Ontario Nav. Co. &	
Niagara Gorge line	\$2,513.75
Stenographer and clerk's expense	20.38
Printing & Special Advertising	42.00
Refund 1 Ticket paid twice (Welsbach Co.)	25.00
<hr/>	
Expense Total	\$2,601.13
Profit on Boat Trip turned into Association	
General Fund	\$1,178.87
<hr/>	
Total Disbursements	\$3,780.00
	\$3,780.00

GLENN R. CHAMBERLAIN,
Secretary & Treasurer.

I certify the above to be correct and a true extract from the books.

G. C. SHAW, Accountant.

MICHIGAN GAS ASSOCIATION

Secretary & Treasurer's Report, Sept. 2, 1913.

Cash on hand as per Treasurer's Report September

2, 1912 \$1,617.83

RECEIPTS

Cash Receipts, Fellowship Fund \$1,080.00

Dues 1911 \$ 6.00

1912 90.60

1913 631.00

..... \$727.60 727.60

Profit on 1912 Boat Trip .. 1,178.87

Sale of Proceedings 2.00

Miscellaneous 17.50

Total Receipts \$3,005.97 \$3,005.97

..... \$4,623.80

DISBURSEMENTS

Subscriptions to Univ. of Michigan—Gas

Fellowship \$1,100.00

Printing Proceedings 1912 Meeting 348.00

Reporting 1912 Meeting 75.40

Salary, Secretary & Treasurer 300.00

Auditing Books 5.00

Printing Stationery and circular letters, etc. 27.50

Postage, Telegrams and Miscellaneous 52.37

Total Disbursements \$1,908.27 \$1,908.27

Cash on Hand, Certificates of Deposit \$1,500.00

In Bank 1,215.53

..... \$2,715.53 \$2,715.53

Total Accounted for \$4,623.80

GLENN R. CHAMBERLAIN,

Secretary & Treasurer.

I certify the above to be correct and a true extract from
the books.

G. C. SHAW, Accountant.

THE PRESIDENT: You have heard the report of the Treasurer, and your applause indicates that the members of the Michigan Gas Association believe that our Treasurer missed his calling when he engaged in the gas business—he should have run a steamboat excursion business.

On motion of Mr. Steinwedell the report was adopted.

THE PRESIDENT: The next on the order of business is the appointment of a committee on nominations for officers for the next year. I will appoint as such a committee Mr. D. H. Frazer, Battle Creek, Chairman; Mr. Carroll Collins, of Marshall and Mr. William Hellen of Kalamazoo.

I notice that there is also to be appointed a Committee on Resolutions and I would like to appoint Mr. Irvin Butterworth and Col. E. G. Pratt as a committee on resolutions.

The next matter is the appointment of a committee on time and place of next meeting. I will appoint W. E. Steinwedell of Cleveland, Chairman, with Henry Schutt of Buffalo and Chas. Wright of Grand Haven.

Mr. Batten reported that he would present the report of the committee on Gas Fellowship on Thursday morning, just before Mr. Casson's talk.

THE PRESIDENT: I should like to say just a few words with regard to Mr. Casson's address. His address is going to start on time tomorrow. His time is somewhat limited, and we propose to devote that entire session to his address. Doubtless many of you know something of Mr. Casson's writing and of his work. . He is unquestionably a live wire and anybody who misses any of his remarks will regret it. To read what he has to say is a good thing, but you don't get it as you do when his personality is present in the meeting. Now, we want to have this room full, and we will be very glad to have you bring any of your friends who will be interested in a real live talk in putting gas over.

Mr. Henry W. Douglas, vice-president, then took the chair while Mr. Blauvelt read his Presidential Address:

PRESIDENT BLAUVELT: Mr. Chairman and gentlemen of the Michigan Gas Association: Not being connected with a public service corporation and having had no such connection for a matter of about eighteen years, I felt myself in a peculiarly fit condition to discuss the public relations of a public service corporation. Perhaps the fact that I am detached from that work directly may make me more ignorant of the real relations than I otherwise would be. On the other hand, perhaps it enables me to see some things a little bit clearer than I might see them if I had the point of view of the men who have the serious problems which confront most of the members of this association.

PRESIDENTIAL ADDRESS
MICHIGAN GAS ASSOCIATION, 1913.

Warren S. Blauvelt.

The objects of the Michigan Gas Association are, first: "the promotion of knowledge in all matters relating to the gas industry"; second: "the establishment and maintenance of a spirit of fraternity between members, by social intercourse and by free exchange of information and ideas"; and third: "the establishment of more cordial and friendly relations between the manufacturers of gas and their patrons, based upon mutuality of interest."

In the promotion of knowledge, this Association has a record of which it may well be proud. The research work done at Michigan University under the auspices of this Association, has contributed not a little to the sum total of human knowledge in its particular field. The various papers presented at the twenty-one annual meetings have been of great educational value.

All who have had the privilege of attending regularly our annual meetings, will agree that they have been completely successful in promoting the spirit of fraternity among our members. Our recollections of past meetings are always pleasant, and we look forward to future meetings with high hopes which are never disappointed. We return to our various fields of labor with renewed ability to cope with our varied problems, and inspired with a high sense of our responsibilities, not only to the owners of the properties by whom we are employed, but also to the communities which we serve.

As the years go by, it is noticeable that the ethical standards for the conduct of our business are constantly being advanced; we feel more keenly our duty toward our customers, and we

strive more earnestly to improve the quality and reduce the cost of our service. The Michigan Gas Association has, I believe, been a considerable factor in this advance. Unquestionably, we have succeeded to some extent in promoting friendly relations between manufacturers of gas and their patrons, but there still remains much to be done before we can realize any where near the ideal relations which should exist between purveyors and actual or prospective consumers of gas. It is, I believe, in this direction, the promotion of cordial relations between our companies and the communities which they serve, that the greatest possibilities exist for increasing the value of this organization, not only to the individual members and to the corporations represented, but also in a very real sense, to the communities which we serve.

The basis of trade is mutual advantage; the only possibility for cordial relations between the two parties engaging in trade is that each shall feel that he is having his desires gratified with less expenditure of effort, of goods which represent effort, or of money which measures the value of goods and of labor, than he could secure in any other way. In the gas business there are four groups of traders, each of which should be convinced that it is securing the maximum satisfaction possible in exchange for whatever it gives to the other group or groups with which it has dealings.

These groups are: First, the general public, which wishes to have available for use at all times, gas of uniform and high quality, delivered at approximately a uniform pressure at the lowest possible price. Second, the investors, who wish to secure the largest possible returns consistent with safety, from the use of their money in the construction of the plant. Third, the great mass of employes, who wish to secure the highest possible wages, to work under the best possible conditions and to be given opportunities for advancement whenever possible. Fourth, the business organizers, managers and engineers, whose functions are to see opportunities for the establishment of gas works, secure the necessary capital for their construction, direct the designing and constructing of the plant, outline general business policies, organize and direct the employes. In general, the ideal confronting the members of this group is to so organize and conduct the

business as to keep customers satisfied with the quality of the services they receive at the price charged; to make the investors feel satisfied with the returns received from, and with the security of, their investment; and to keep the employes so well satisfied with their wages, the conditions under which they work, and the opportunities for advancement, that they are willing at all times to put forth their best efforts to do their work in harmony with the policies of the company. The rewards which this group desires are, first, an income in salary or share in profits, or in a combination of the two, sufficient to attract to the gas industry men of the exceptional type necessary to perform even with moderate success the functions outlined; second, and with the greatest men in this group, of far higher importance than financial returns, the opportunity to develop their personalities in the performance of great and exceptional services to each of the other groups directly, and indirectly to the world at large.

At first glance the interests of these various groups appear to conflict; can they be harmonized, and if so, how? These are the questions which confront the members of the fourth group mentioned—the business organizers, managers, engineers, etc.: As the membership of our Association is largely made up from this group, we have a particular interest in considering these questions. Our success in our chosen field depends largely on the extent to which we are able to harmonize these apparently conflicting interests.

Lack of harmony is generally traceable to ignorance; where honest people disagree as to facts, the cause of the difference of opinion is invariably the lack of definite knowledge. Where ignorance prevails, differences of opinion naturally follow; when knowledge supplants ignorance in any realm, harmony of opinion results. Men no longer dispute about the general form of the earth; physicians agree that yellow fever is transmitted by the mosquito. Are there facts now known or discoverable, the general knowledge of which would produce that desired harmony between the seller and the consumer of gas which is one of the avowed objects of this Association?

With regard to certain relations between the various interested groups, there can be no difference of opinion among well

informed people. Capitalists will not voluntarily advance the money necessary to build, extend, or improve a gas works, unless convinced that they will secure greater satisfaction measured by returns from, and safety of, such an investment, than they can secure from the use of their money in any other undertaking of which they have knowledge. This fact, then, gives us a rule by which we may determine the rate of interest or dividends which must be paid the investor to secure his co-operation in the enterprise; the rate must be sufficient to attract capital whenever the necessity for the same arises; from another point of view, the rate should be so attractive that any investor could under ordinary conditions, sell his interest in the business for what it cost him. If the returns to investors are less than the amount necessary to secure these results, additional capital for necessary improvements and extensions will not be obtainable, and the service will suffer, thus producing dissatisfaction among customers.

Rates of wages, and working conditions generally should be such as to make the mass of employes feel that they are doing better, all things considered, than they could elsewhere. If there is any difficulty in securing employes having proper qualifications, or in retaining in the service employes who have demonstrated their fitness for the work, there is something wrong with their treatment which should be corrected promptly, or the efficiency of the organization will deteriorate; unsatisfactory service, the inevitable consequence of an inefficient organization, will develop dissatisfied customers; and instead of the desired cordial relations between buyer and seller, antagonism and distrust that may continue for years will be engendered. But labor inefficiency will not only injure the quality of the service; it will also multiply the cost thereof. Owner and customer therefore have a mutual interest in seeing that employes are so treated as to secure their most efficient service.

The quality of service and the cost thereof in the final analysis are directly traceable to the efficiency of our fourth group—the managers, the directors, the engineers of the enterprise. To supply the public demand for efficient service the capitalists seeking opportunities for investment and the men willing to

work must have effective leadership. To secure such leadership, the rewards for success in the gas industry must be commensurate with the rewards in other lines of activity. But the rewards should be dependent upon the success of the enterprise, and this success should be determined not only by the regularity with which interest is paid on the bonds, but also by the satisfaction expressed by patrons.

If these statements of the relations of the various groups of people interested in the conduct of the gas business are correct, the fundamental mutuality of interests is evident. Any lack of harmonious relations between a gas company and its patrons then, must be due to bad management, to a lack of knowledge of facts, or to the introduction into the problem of certain factors which interfere with the normal reactions which would take place between the four groups directly interested.

Among such disturbing factors may be mentioned the following: inequitable rates, long term franchises, and unjust taxes. Inequitable rates have been discussed so frequently, and the subject is so well understood by those interested as to make unnecessary any extended remarks at this time. Equitable rates are possible only when each consumer pays as nearly as may be determined the full cost of the service he receives and no more. (Full cost of course includes proper returns for the capital invested and an adequate reward for good management.) To secure equitable rates the customers' bill must include three items: a "consumer's" charge, to be the same for all customers, sufficient to cover the cost of carrying the account, a "readiness to serve" charge based on the maximum rate of consumption, the cost of the investment (i. e., interest, depreciation and maintenance) required to meet this maximum demand, and the load factor of the individual consumer in its relation to both the daily and yearly load factors of the combined consumers; and a charge for the actual quantity of gas consumed. With such a system of equitable rates, discrimination between patrons would be eliminated and the sales of gas would be greatly stimulated; increased sales would decrease the cost and make possible a reduction not only in the price of gas but also probably, a reduction in the readiness to serve charge.

Franchises covering a term of years have in the past been necessary in order to secure a market for the sale of bonds. If the security of both principal and interest were assured by some governmental action, other than a long term franchise, the necessity for the franchise would disappear. The main objection to a long term franchise is that although it may be absolutely fair to both parties when agreed upon, it is impossible to cover future contingencies; hence it is likely to work injustice to one or both parties in a few years, and interfere with the normal evolution of the business. Thus the very instrument which was relied upon to insure good service may become a potent factor in retarding or preventing improvements in the service. To secure efficiency there must be freedom to make changes in methods, standards and rates to meet changing conditions.

Unjust taxes are a serious handicap to good service at a low cost. When one considers seriously the question of taxation, the injustice and absurdity of collecting any taxes from property employed to serve the public at once becomes apparent. The presence of gas mains in a street enhances the value of the land on that street; to tax the gas mains is practically to take from the gas company a part of the value which it has produced and give it to the owners of the land benefited. The gas company in turn must add the amount of taxes to the price of gas, and the ultimate consumer thus pays in his gas bill taxes for which he receives no benefit. The increased cost of gas due to unjust taxes limits its economic field of use. Abolish such taxes and gas consumption will increase, the cost of manufacture and distribution will decrease, thus making possible a still further reduction in price, and consumers will be doubly pleased.

If these statements of the ultimate effects of inequitable rates, long term franchises and unjust taxes are correct, it follows that even with the most efficient management and a general knowledge of the facts regarding the gas industry, the desired cordial relations between gas manufacturers and their patrons cannot be fully realized until these disturbing factors are eliminated.

While it may be true that corporations have no souls, it is certainly true that they have characters. The character of a corporation, like the character of an individual, is the resultant of innate tendencies acted upon by environment. In the formation of the character of individuals, unquestionably environment is the stronger of these two factors. As with individuals so with corporations; if by law or custom, efficiency or service at a low price to the consumer be made unprofitable and inefficient service at a high price be highly rewarded, no matter how good the intentions of the corporation managers, the corporation will develop, through no fault of its own, such a character as will make it distinctly unpopular.

Up to the present time the efforts of this Association have been expended mainly in the attempt to advance the gas industry by the improvement of methods of manufacture, distribution, consumption and sale, or in other words by adaptation to existing environment.

Has not the time arrived when we should devote serious efforts to improve the environment of the industry, by eliminating therefrom all factors which tend to prevent the realization of the fundamental mutuality of interests between gas manufacturers and their patrons? Would it not be a wise step for this Association to appoint a committee to thoroughly investigate this question and report at the next meeting? Action by this organization based on definite knowledge, the result of such careful investigation as suggested, might prove of great value to the gas industry and to the public for whose service the industry exists.

THE CHAIRMAN: Gentlemen, we have heard the most excellent address by our President. I believe it is customary to refer this to a committee, and we will appoint on that committee as Chairman, V. F. Dewey, with R. Shacklette and Homer Eaton.

EDUCATING THE PUBLIC.

Ernest F. Lloyd.

Educating the Public—I have wondered whether it would have been possible for your President to have selected in any other three words a more comprehensive title, and also whether he really assumes that I may be able to do adequate justice to such a title and in the space of fifteen minutes.

Educating the Public—The watchword, nay the shibboleth, one might say the fetish of the twentieth century; none the less the sound basis of all hope for the future welfare of mankind.

How long ago its education began is lost in the mists of the past; how long it shall continue in the future shall be limited only by the life of the world. Sometimes it goes forward in rushes, sometimes haltingly, sometimes it seems to stagger back. Sometimes it appears to settle down in content, only to burst forth and ruthlessly tear down its habitation, always to build again, reusing the eternal cornerstone of its foundations, reconstructing, rearranging, finding and moulding new materials to its use, always dissatisfied with that which it has wrought, ere it is completed.

It was a great step in Educating the Public when King John signed the Magna Charta, and those who demanded that concession from Vested Interests were the Revolutionaries—the Progressives—the Socialists of their day. What half taught, dangerous agitators they must have been, those sturdy, barbaric old nobles that banded together, took their lives literally in their hands, and forced themselves and their demands upon the Court at Runnimede. And a certain Tea Party famed of story, partici-

pated in, doubtless, by some of the descendants of those vile Progressives of King John's time, ushered in a new era and "the shot that was heard around the world" heralded a totally different conception of life and human relationships than had ever before been promulgated as a possible working basis of civilization.

That there was a time when education was otherwise regarded than it is to-day, we may find in the evidence of many old sayings—"What you don't know won't hurt you," a fallacy that required the horrors of the French Terror to break its hold; and "A little knowledge is a dangerous thing," which perhaps has some application in our own day.

Educating the Public—shall we for our purpose look at it from the point of view of the pedagogue, who would equip our youth with knowledge of the means for the most expeditious, economical and efficient use of his mental faculties; or shall we regard it from the standpoint of the theologian who would largely have us believe through faith that that which has been said is so; or shall we only consider it as does that Adcrafter who would impress upon us that without gas there is but darkness, and that his enemy the electrician is a heretic who should be electrocuted on one of his own unsightly poles?

Now I am neither a schoolmaster, a theologian, nor an Adcrafter, so that I shall occupy your attention from a standpoint that, perhaps a little in anticipation, I might call "The Spirit of To-day."

That Spirit, as I conceive it, accepts all that is proven and rejects nothing that is not proven; realizes that all our relationships are of human conception, our inspirations from a source whence we know not, yet ever and always higher and beyond the power of our execution. So it would spread the mantle of charity over our shortcomings and diligently work upon the foundations for a better posterity and perhaps in so doing accomplish some advancement of its own time.

Perhaps it may not be out of place to enquire who are the Public, and what is an Education. The Public to you are all those, no doubt, on the outside of your counters, and possibly your perfectly educated Public would be that which would all

pay its bills promptly, never complain of the service, accept the ruling price as a gift of the gods, and talk not of municipal ownership. Then would there be contentment and "Contentment is great gain" says the old proverb; but I say to you in the Spirit of To-day that "Contentment is great loss." For only in travail of spirit are we spurred to seek, and only in the fire of trial may we find, the Light of Righteousness.

But if the Public to you are those on the outside of your counters, then must you also be the Public on the outside of other counters, and so we might apply the saying about the ability to perceive the mote in another's eye without being hampered by the beam in our own. And well might every business concern—Public, Private or Individual, carve deep over its doorway and seek in its daily dealings to realize the beauty of that divinely inspired prayer:

"O wad the gods the giftie gie us
Tae see oursels as ithers see us,
It wad frae mony a blunder free us,
An' foolish notion."

Every generation, and perhaps this one in particular, is prone to think that not only is it a greater and a better than any that have preceded, but to contemplate in retrospect the benighted folks of old; forgetting that we are borrowers, every moment borrowers, over head and ears in debt to even the forgotten, to even the unknowable past. And that likewise we owe obligations that we shall never fully discharge, to the unknowable future. Remember you that even the simple right to freely walk on the public street, to even meet as we meet here, accepted by every man as a matter of course, was won at countless cost of blood and pain and suffering, and so it is through almost all and every one of the innumerable privileges of which we think as nothing, and yet all of which shall through us affect the welfare of Posterity. As we owe the past, so must we earn the obligation of the future.

Thus we have many angles to Educating the Public—and I will take your attention to lay before you a thought that I believe the future holds as a working reality, and that might well be to

us of this time as the Star over Bethlehem in the Work of the Day.

The printing press has been growing apace; the State is coming to recognize that it has a paramount interest in the child superior even to that of the parents, and that every human being is either an asset or a liability to the community—either is worth something more than his cost or costs something more than his worth. The world is growing smaller in the sense of the annihilation of distance, and men are coming closer together in that the affairs of one are becoming more and more the affairs of all.

If you will go into the auditorium of one of our great institutions in this city, you will see over the platform: "No man liveth unto himself alone," and the world is subconsciously amplifying into that beautiful thought a broader and a better meaning, until some day may we not hope to likewise see over the doorways of our great Public Institutions—

"NO MAN WORKETH UNTO HIMSELF ALONE."

For centuries the business of men was religion, and in its pursuit were practiced more horrible, unspeakable cruelties than may ever again be. That conception of life has ebbed and now I see the rising flood of a new tide that shall make the Business of the World its Religion, and mark its pursuit with peace and mutual interest and help.

We have been taught for perhaps untold time before it was established in the Mosaic law, that we should set aside one day out of seven for the contemplation of higher things, and that very old idea has not been uprooted these two thousand years, despite the confounding question "Was man made for the Sabbath, or was the Sabbath made for man?" Yet we are growing, slowly it is true and painfully, as all human things grow, from the belief that we should think and act in a certain way on one day and might think and act in a different way on the other six, to the belief that that which we should not do on one day we should not do on any other, *and that that which we should not do for ourselves we should not do for a corporation, else that corporation will have no soul.*

And it was said likewise in those days, those days that hold us debtor to remind us of our obligation to Posterity—"Let your light so shine before men that they may see your good works." That has been accepted as exclusively applicable to the Business of Religion, but the Spirit of To-day as I conceive it would have you think of it as primarily applicable to the Religion of Business, and as particularly appropriate in Educating the Public, *and especially as to where that education should begin.*

We are *told* that employees are required to be uniformly courteous, painstaking, obliging and informing. If that be a requirement of the corporation, *are* they uniformly courteous, painstaking, obliging and informing? Is their conduct always such that the Public *knows* that they are so? Nay, it is not so. No man charged with directing any force to-day, and alive to the wide responsibility of his position, but knows that the curse of the time is inefficiency and indifference. It is the little knowledge being the dangerous thing. Our learning has run ahead of our assimilation of its teachings. We gorge our minds with facts without learning how to think. We suffer from mental dyspepsia. We have experienced an intellectual earthquake caused by the discovery that man can apply the forces of nature—steam, electricity and others to his daily purposes. The mental stimulus of this knowledge has created enquiry and research into every element of our being, the structure of the world and the universe, and our religious, political, economic and social relations. Our ethical house has been demolished, its walls, its windows, its doors, its sheltering roof are scattered about us and we run riot in our confusion of ideas. We know that the criminal should not be punished for revenge, yet we have not determined how to remake him into a useful member of society. We know that women should not be the burden bearers of old and in our reaction we would set them on a pinnacle of idleness in an unwise freedom to follow the vagaries we see in dress and action. We know that wealth is the product of the toil of men, the result of human necessity and we jump to the conclusion that it should be equally distributed. We are possessed with the idea that labor is a drudgery, a necessary evil to be minimized all possible.

As always there are those who would rebuild the structure as it was before. There are those others who would incorporate new material, using that which is sound from the past. And there are those who would discard all the old and construct a world of their own untrained conception. Reactionary—Conservative—Progressive—Socialist, what not we may call them—struggle to determine who shall design the new house and how it shall be built.

The so-called working classes do not understand the true meaning of being born Free and Equal, and the so-called leaders of Business fail equally of comprehending "Who shall be chief among you let him be your servant."

It is a time for a steady head, a stout heart and a glorious optimism to fling itself into the chaos and battle for an orderly reconstruction, content the while that the mite of its effort is worth the service.

There is need that we resolutely set ourselves to the task of gathering together the splendid fragments of the past, mould them to fit our larger estate, and with them build a new, a more truly Christian business home—an office of mutual service for social good, over the desks and counters of which we should blazon in letters of gold and shining light that royal and noble motto "Ich dien."

I have before me the expression of one on the outside of our counters contained in a paragraph by Marshall Cushing, a vigorous and fearless, if ex parte, champion of his espoused cause, of whom perhaps some of you may know, and I think it appropriate to quote it with the injunction that because we can each in his own way recall the truth of its particular accusation we yet forget not the beam in our own eye:

"My friend Beach, of Beach's Magazine, criticizes the telephone monopoly in a rather humorous way; his telephone was in service for a month or so before he could get any officer of the company to recognize the fact that it was mistaken in having everybody who called him advised that the telephone had been taken out.

It is a little more serious than this, this preposterous inefficiency of the telephone monopoly. It is bad business altogether,

because while one customer will laugh, a score or a hundred will cherish personal resentments, and they will do it quietly for a long time, but then all of a sudden the dissatisfaction will break loose; for there is no man, if he be a man at all, who will not find a way some time to get back at anybody or anything, and especially a public service corporation, that has taken advantage of him when it was impossible or inadvisable for him to strike back effectively. It is this intolerable nagging of stubborn and preposterous inefficiency on the part of the telephone monopoly that breed the socialist faster than can be imagined.

Sometimes it seems as if the bigger the financial or business interest the more careful its management ought to be to serve the public, and yet the converse is only too true in many cases. It is as if an inevitable concomitant of power was arrogance, and a more and more inexplicable ignorance of the sensitiveness and the jealousy of the public in these times."

Verily, there are many ways of Educating the Public—"Whatsoever a man soweth, that shall he also reap," even as "The iniquities of the fathers are visited unto the third and fourth generation." The indifference of public service corporations in the past, when public business was a private affair, has left its consequences in evidence just as the same inefficiency, the lack of heart in work, the same incompetence, to-day foments the discredit and attacks of our times on almost all public service corporations.

If you ask me then *how* we should proceed about Educating the Public, I would think to start from the scientific axiom that "No stream can rise higher than its source," and you will gather from what I have said that the public regard for any public service corporation is founded in the attitude of that corporation itself, from its stockholders and directors, its highly priced officers, its anteroom clerks, down through all those departments which directly meet the rank and file of the public, to the man in overalls who goes from house to house with his kit of tools, and the laborer in the trench. *The place of beginning is inside our own counters.*

And not until the time comes when every one of those employees has first been educated by the corporation to proceed

about and do the work before him from the conviction that he can not shirk, be careless, indolent, indifferent or discourteous and still be a good man—a good husband—a good father—a good citizen, a valuable employee—not, in short, until he recognizes that work, *his* work, is a Christian duty that he shall do from the joy and obligation of human service—will it be possible to Educate the Public to an ideal regard for the corporation.

No man who believes that the chief end of work is the pay day; no man who believes that his value to himself and to his employer and to the State, is measured only by the size of his salary and his consequent position in the community; no man who is afraid, or who is indifferent to doing the best with the powers residing within him for fear another will get the credit, or because a superior does not recognize his work, or because he does not think he is paid his value yet continues his service, or that another gets too much; will ever efficiently educate the public to the end of an inherent belief in the probity and sincerity of his corporation on the part of the public. No man is too highly placed, none is too humble in this work of Educating the Public, for "They also serve who only stand and wait."

When our corporations shall recognize that they are created by the public for the public good, and shall have so imbued their employees with that belief that there may come the intuitive public feeling that the general manager, the force behind the counter, the fitter in the shop and field, the lineman, the motor-man, the conductor, the humble laborer on the street, all are Missionaries of the Corporation, radiating from their personalities the light and enthusiasm of their belief in their corporation and their joy in their daily tasks, all together working towards the amelioration of the very real life problems of their company's customers; then shall we have arise in the land a new regard and a new hope and the corporation in business will have become the greatest, most potent influence in Educating the Public. Say you that such would be the Millennium? No, it would scarce be even the beginning of the Millennium. Say you that it is an impracticable Ideal? Look about you at the welfare work that every really greatly managed corporation is even now diligently studying and applying. The inculcation of temperance and its

insistence in responsible places ; the boards of conciliation ; the safety committees ; the rest rooms ; the model towns—all are evidence of that Spirit of To-day in the name of which I speak.

Then hark you back to that long past which holds us debtor. When Religion sought Apostles to spread its gospel in face of the dangers of the jungle and the fanatic, did it seek hirelings? or did it receive volunteers who had heard and heeded the injunction "Go ye therefore, teach all nations?" But were one to suggest to-day that a public service corporation accept no applicant for a position upon its force unless that one had agreed to a Declaration of Principles upon which that Corporation proposed to live and do its business with the public, and unless that applicant took his solemn oath that he believed those principles and vowed to advance them with all his ability, and with his life if necessary; that proponent would doubtless be looked upon as a fit subject for an asylum, and the chances are that he might be—in this day that thinks itself so superior to those days when Religion was the Business of Life and life was thrown away in that business with a reckless abandon for a glory of belief that laid deep the foundations for so many of the blessings we enjoy.

True, in those days men fought and died for creeds that to-day no man holds, and equally true it is that we to-day contend for things upon which another generation perhaps will smile; even as the living contenders have this year celebrated the fiftieth anniversary of one of the greatest battles ever fought for an ideal and for the cause of which, momentous as it was in its travail and suffering, we could not now in all this Union find two men to differ. And yet, who shall say that that great battle was not a necessary chapter in the education of the public to its present thought of human life and civic duties, and who again shall say that the regulation, the hampering, the interference, the worry and the annoyances to which the corporation manager of this time is subjected are not necessary steps in that evolution towards a better understanding and a truer appreciation of the rights, the obligations and the duties of both the Public and the Corporation when in the fullness of time, there shall have been accomplished another onward step in Educating the Public.

DISCUSSION

THE PRESIDENT: Gentlemen, I think that we all owe the thanks of this association to Mr. Lloyd for presenting a paper breathing such high idealism. While perhaps some of the thoughts in this paper are a little beyond the practical realities of daily business yet we should not lose sight of the fact that the ideals of yesterday become the achievements of to-morrow. This paper is now open for discussion. I hope you will feel at liberty to discuss it very freely.

MR. IRVIN BUTTERWORTH (Detroit): Mr. Chairman, I can't discuss this paper adequately; I am sorry I can't. That would be a pretty difficult matter for me. When I think of the difficulty of educating the public in anything in which they are not very much interested I am reminded of the story of the old darkey who went to Mexico from this country to live. He remained there two years and came back in great disgust. He said he had been there two years and yet the people of that country hadn't learned to understand his language any better than when he went there. I heard of a man who lived in a certain city who went away for three years. When he came back an old friend of his met him and said, "Hello, been out of town?" That illustrates the difficulty of educating the public along the lines in which they are not interested.

I can't criticize Mr. Lloyd's paper adversely at all. The only criticism that could be applied, as our President has said, would be to say it is a little idealistic, possibly beyond present realization, and more's the pity. He deals rather in generalities. I wish he could tell us exactly how to bring about these reforms. Shall we pay our men more money, or appoint more superintendents? We all realize that the things he advocates we ought to have, but just how to do it I confess I don't know. This paper and the address by your President are very much alike and I will say that I have attended gas meetings for nearly thirty years, and I don't think I ever heard a better President's address than I have to-day, nor a better initial paper than that just read to you.

I spoke a bit ago about the difficulty of educating the public in matters in which they are not interested. That is illustrated

by the difficulty of educating them in matters in which they are interested, or ought to be interested. For instance, take the measures that have been advertised for the preventing of tuberculosis. See how hard it is, in even a matter of that sort, where we are all interested, how difficult it is to educate the people along the simplest lines of preventing that sort of thing. They have ordinances prohibiting expectoration in street cars and on sidewalks, and things of that sort, which illustrates how difficult it is to educate the public in matters in which they are interested. Now, here is the gas business in a city. The average man isn't a bit interested in the gas business or the gas company. The average consumer doesn't care a thing about it, doesn't care whether the manager is old or young, or lives in an alley or on a fine street; all he wants is gas at a cheap price and good service. So I feel that while welfare work, advertisements in newspapers, or anything we can do along these lines is good in the final analysis in the education of the public—which means our consumers in the gas business—is accomplished best by giving good service, the best attention to consumers and courteous treatment all along the line, even as Mr. Lloyd himself has said. Just how to bring that about, that very best service, I confess I don't exactly know in detail. Lots of supervision might be one way, and frequent meetings of employes for encouragement and talk along these lines would help a great deal.

I came to town recently from a place where I have been spending the summer, where I had my newspapers sent to me, and before I left there I wrote to the two newspapers saying "Please send my paper from now on back to my home," giving them my address where they had been sending it. I came back and waited four or five days and they didn't come. That didn't make me feel very good. I think we ought to eliminate little things like that, if we have them.

I went out of town yesterday on the 1:40 train and when I bought the tickets I asked the clerk if there was a diner on that train, and he gave a grunt that I took for "no," and I asked him again, "Did you say 'yes' or 'no'?" He gave the same grunt and I thought he said "No". I got on the car and about the first

thing I heard was "Last call for dinner, dining car in the rear." But I had eaten my business lunch before I started. It is little annoyances like that that we should eliminate. Every contact the consumer has with the company should be pleasant. The idea is that he should hardly know there is a gas company in town. I think that would be quite ideal, and is about the only education we can work for and acquire.

MR. F. P. KELSEY (Chicago): I don't know of any way it strikes me as being more logical or more reasonable to attack a very abstruse problem than the way that has been started right here in Detroit. They call it "humanizing the business," and it merely works out in giving each employee a line on the reasonableness of treating the customers of the gas company just exactly the way he might wish to be treated. I don't know whether many of us have seen the series of advertisements that are now being run in the Detroit papers with reproductions of the photographs of different officers of the company. They say "Mr. Dewey believes" and "Mr. Ewing says," and go on to say what Dewey and Ewing do believe. Customers, when they call up by 'phone, if they happen to call the wrong department, are told, "Wait just a minute and I will refer you to Mr. So-and-so who has charge of this particular work." I dare say there is not a person who has had occasion to get in touch with any public service corporation who has not been made greatly indignant by having this and that man say "Wait a minute." He would get the other party on the 'phone and this person would say, "Well, what is it?" The man would begin to state his troubles and he would hear "Wait just a minute. I don't take care of that, I will refer you to someone else." The someone else will say, "What is it?" I have had that same thing with an electric company in the city where I work, not, fortunately, with the gas company. I don't know of any one factor that conduces more to good feeling toward the company when telephone calls are made than their proper handling. Really telephone calls are a great deal more important than any one of us realize—the right kind of a voice, the hight kind of a telephone girl. I know an industrial institution in the town where I have lived about ten years

where one particular girl is making more friends for that company than any man in their employ. She happens to have a pleasant voice and is a gentlewoman.

MR. STERLING (Three Rivers) : Mr. President, I have been told that when a man first enters the United States Senate as a member of that body that it is hardly considered proper for him the first year to get on the floor and make an address. This is my first meeting with the Michigan Gas Association. After listening to this most excellent paper, I cannot refrain from expressing my appreciation and approval of the high ideals advocated, and while it has been said that it is a hard matter to put into practical effect these ideals, it can to a great extent, be done; and the nearer we come to these ideals the easier it will be to educate the public. The gentleman who spoke a moment ago said he would have liked it had the writer been more explicit and told some of the ways by which to overcome some of the difficulties in educating the public. My experience in the past has been entirely in the Electrical field, but our problems are the same, and I firmly believe that the men behind the guns, the men who operate your plants, and those who come in daily contact with the public must first be educated and become thoroughly imbued with the spirit of courtesy to the public, and usefulness to the company, and in my opinion there is no better or surer way than to have every man feel that he is being properly compensated. I do not mean by that extravagant salaries, but that service and courtesy be recognized, and that men with these necessary qualifications be accordingly compensated and those who do not measure up to the standard be replaced by better material. I believe, as has been said on this floor to-day, it is an easier matter to educate your employees than the public, and that this education should begin with in our own organization.

MR. V. F. DEWEY (Detroit) : I had the pleasure of reading Mr. Lloyd's paper before coming here, and in reading that paper it occurred to me that he had gotten the cart before the horse. Several years ago I made up my mind it was useless to attempt to educate the public except along certain lines; first,

the sale of our products, and second, the political conditions under which we work, but I did believe and learn at that time that the public was in a fine position to educate us. That is one of the reasons why we are running a series of personal advertisements, not to tell the public the details of our business so much as it is to give the public an opportunity to tell us how to run the gas business. If we conduct our business from the viewpoint of the public and are educated by the public, we will conduct it in a great deal better way than we are now. All of us are too narrow in our viewpoint. As a rule the public is about right, and I think if you read Mr. Lloyd's paper carefully and the historical allusions that he has made, you will find that all of them point to just one thing, that the public are educating the government. We want our men, I want myself, I want all of us to feel that we are there to get the public's attitude and that only, and if we get that in our mind thoroughly and become educated by that we won't go very far wrong, and we will forget the platitude, if I may speak of it that way, "Educate the Public." The public doesn't need education except along certain political and sales lines.

MR. SLOAN: Mr. President, Mr. Dewey's idea is the same one I had or formed when I read this paper. I made just a few notes which I will read.

"I have read this excellent paper with much interest and pleasure, but when I consider the conditions or circumstances leading up to it, I cannot help but feel that "being educated" would be a more fitting heading or topic.

"As I understand it, the original 'You-be-damned' policy of corporations was the tune the public were being educated by, but it didn't require a great while for them to learn, and then they started in to teach and from the thought brought out in Mr. Lloyd's paper, I gather we are learning. The only thought I wish to bring out is that we should not inoculate the public with the idea that we are instructing them, but rather with the knowledge that it is an education on the part of the business."

COL. E. G. PRATT (Chicago): Mr. President, I think all that can be said in a minute of discussion possibly has been said.

I couldn't help but feel during the reading of Mr. Lloyd's paper that, during my brief sojourn in Detroit, and Michigan, I had missed something. I missed the classic expressions of my associates Mr. Lloyd has given to you in this paper. I have known Mr. Lloyd a number of years and I have had some correspondence with him, and I have always felt he had missed his calling, and that he shouldn't have attempted the rough work of building gas works. I formed that opinion a long time ago, and I cannot but express it here at this time. I certainly agree with what Mr. Butterworth has said that the two papers which have been read—the President's address and that of Mr. Lloyd's, are as fine as anything I ever listened to in any gas association meeting or any other, and the thoughts expressed by Mr. Lloyd cannot help but lift us up to higher ideals. Those are the things that certainly do us no harm. So far as reducing the theoretical or the ideal side to practice, I have had those same feelings and the same thoughts that Mr. Lloyd has expressed. I have tried to carry them out in a great many instances, and I am free to confess that I have been discouraged many times. I remember while I was in Milwaukee we undertook there and—just referring to one time or one reference in Mr. Lloyd's paper—we attempted there to do things for our own employees, having just built a new gas works and having in contemplation the improvement and enlargement of our office building. We undertook to do some things there for our employees. Now, possibly we didn't conduct that educational spirit long enough, but in that brief time that we did try it, I was certainly very much discouraged. For instance in our office we set aside a room and furnished it comfortably and nicely for the young women in the employ of the company. About three or four times a week I would make a trip around through the office and especially into that room for the purpose of discovering whether or not our efforts in providing comforts were being appreciated. This rest room was a place where they could go and eat, where they could bring their luncheons if they were obliged to do that, and I think we also provided them with some papers and magazines, but it was not a success. They hadn't pride enough in the condition and appearance of the room to keep it clean, and in order to carry out

our ideas of what it should be it was necessary to appoint some one who would give his or her particular attention to the condition of that room. The same thing prevailed at the works where we provided for our men a kitchen where they could heat their coffee or fry steak or broil it or anything else, shower baths and other things, but it wasn't a success so far as the interest of the men themselves were concerned, and it became necessary to have some one appointed whose sole duty it should be to keep the condition of that room even sanitary. That may be a long ways from the suggestions made by Mr. Lloyd. My feelings and sympathies have always been with the workmen, and it has always been my aim and desire through life when I have had charge of men to make their surroundings as comfortable as possible, believing that by doing that we could get from them the best results. I think I express the ideas of a good many men who have had the same experience that many of those things are discouraging. As Mr. Lloyd has intimated we probably haven't carried our educational ideas on far enough. We haven't thoroughly understood the class and character of men that we have had to deal with, and more education was necessary along the lines to bring them in harmony with what we were willing to give them.

PROF. A. H. WHITE (University of Michigan): I am afraid I am somewhat like the President, since while I do belong to a public service corporation, the University, I am not in direct touch with the problem as you are. Someone has said something about the slowness in educating people which makes me think that perhaps I can bring some cheer. We are supposed at the University to be training people whose sole business at the time is to learn, and yet it is always most disheartening to ask a student the year after he has learned a thing what it was he learned the year before, because he rarely knows and ordinarily doesn't know that he ever heard of such a thing before. The human race forgets vastly more rapidly than it learns, but it does make progress. Mr. Butterworth spoke of the disheartening slowness of the campaign against tuberculosis, and yet if we look back ten years we can see that really very great progress has

been made in that campaign. The medical statistics show that the death rate is decreasing and it is bound to decrease at a much greater rate in the future. People are very careless about typhoid fever, and yet they are vastly less careless than they were ten years ago, and the general public is being educated and is being educated at a progressively increasing rate. It is rather remarkable that both the President's address and Mr. Lloyd's paper should be on the same general subject, and start with the same general position which, if I understand it, is that the public will give a square deal if they only know the circumstances. A corollary in both of these papers, as I understand then is the assumption that the public service corporation on its part is not asking for more than a square deal. In our position at the University I receive quite a number of letters from people who want to know something about the gas business and about that most perplexing subject of gas rates. They think that on a postal card or by reference to some five cent pamphlet, they can obtain absolutely authentic information to suit their particular cases. I have a number of times tried to convince people that the problem which they are trying to meet is one which cannot be solved in any off-hand manner, and the efforts at education have sometimes apparently been futile. I spent, I think, over an hour one time in conference with the mayor of a city in Michigan, trying to convince him that the fluctuations in gas pressure in his town were not purposely put there by the gas company who were putting the pressure up and forcing gas through the meters and then dropping the pressure to pull the gas back. Perhaps I was a very poor teacher, perhaps I ought to have done that in five minutes, but he certainly had that idea very clearly in his mind, and it took a good deal of talk on my part before he consented to drop his impression. I am not sure whether he ever was convinced about it. There comes a time periodically when the consumer certainly needs education in relation to the public service corporation. There always comes a time when questions have to be referred to the individual voter, and your individual voter usually knows nothing about the case except what he has been told and usually he firmly believes that which he is told by one side is wrong and what he is told by the

other side is right. He is influenced largely by individual impressions of the way he has been treated. The character of the service, and the smaller attentions which the consumer receives from the public service corporations are the largest factors in deciding the way a consumer votes when the question comes up. It is a matter of personal prejudice rather than a matter of knowledge. But if the public service corporations are seeking a square deal and if the consumer is willing to give a square deal if he understands the issue, then certainly the effort to educate the consumer so that he may have a clear basis on which to form his opinion is well worth while.

MR. E. F. LLOYD: Mr. Chairman, the remarks that have been made upon this paper have been to my mind much the most interesting part of the contribution. While I endeavored to restrict the scope of the paper, it necessarily covers a field that might occupy our attention endlessly.

Now, without desiring to be in the least degree invidious, I would say that I have watched the advertisements that have been appearing for some time past in the local papers and have thought that they were very clever. Nevertheless, regardless of what "Mr. Dewey says," or of what "Mr. Ewing thinks," or of what "Mr. Ritter believes," I know that if a meter reader goes across a clean kitchen floor with muddy feet, the "Consumer will think" that Gas Company a nuisance, and to avoid that feeling on the part of the consumer is one of the things I mean by beginning education inside your own counters.

Now there is in this city a street railway company that has been in more or less continual trouble with the public authorities and with the public itself. Maybe the public is very unjust; but let me cite one incident. Quite some years ago now there arose a demand for the equipment of cars with air brakes. It was met by a general reply that air brakes were not only less efficient than hand brakes but could not be used on the then existing equipment as there was not room in the trucks, and that many cars would have to be discarded if it were forced. Numerous committees of the Council were taken out to observe comparative demonstrations and it was undoubtedly a fact that on those

occasions the company did stop its test cars more quickly by hand than with the air brakes. None the less the demand became insistent, and took the form of an ordinance which was promptly contested by the company. It went through all the courts to the Supreme Court of the State, substantially on the proposition that it was confiscation. But when the Supreme Court had finally decided the ordinance a reasonable exercise of the police powers of the city for the general safety, and no further appeal or delay could be had, the company promptly equipped all its cars with air brakes and they were obviously the same cars that had been previously in use. I say the public were educated by the railway corporation in that circumstance. You can draw on your imaginations for what sort of education it was.

I know of another railway company that immediately upon the occurrence of a wreck, as quickly as they can get to it, cover it with canvas and bottle up every man connected with it, not allowing a word to be said to the representatives of the press or anybody else. It is asserted by that railway company that one of the newspapers in its town will not give it a square deal. Now again, I say that company is educating the public, educating them in any way you want to imagine, but educating them all the same.

Mr. Butterworth speaks of not getting his newspaper transferred from one address to another. What does he think of the efficiency of that newspaper management? Hasn't he been educated?

He also speaks of having been told there was no dinner on the train and of having rushed down and gotten a dyspeptic lunch, only to hear on reaching the train, the "last call for dinner." I say that Mr. Butterworth received by that circumstance a certain education as to the efficiency of that railway corporation. He does not think of the particular clerk who failed to give him proper information as having perhaps forgotten, or not having been attentive, because it was the business of the railway company to have an efficient and attentive clerk in that place at that time, and he carries, back in his mind, the inefficiency of the railway company as a whole.

I can relate some personal experiences. I went into the office of a large gas company some time ago to call on the general

manager. I applied to the young woman at the outer desk, asking if the manager was in. She said "she would see." She retired to the inner sanctum and came out with the information that he was "engaged just at present." Well, now, it had cost me money to get to that town, though she may not have known it, but the manager would had he stopped to think. At all events, I did not know whether I could see him in ten minutes from then or not until the next day. Later on I got my interview with that man and while sitting in his office, again came in the girl saying, "Mr. So-and-so wants to see you." "Who is he?" "Why I don't know." "What does he want to see me about?" "Why he just said he wanted to see the General Manager." "Well, ask him to wait, I am busy for a while." I say that man, I do not know who he was or whether he ever got his interview, none the less got some education about that company, just as I did on my first call.

I went into another city, a city, incidentally, where the company was having some serious differences with the authorities over the renewal of franchise. Note that I say that the difficulty was with the authorities, because that company subsequently got its franchise, and I think the incident that occurred to me may throw some light on why the public did not back up the authorities in their contest with the company.

There was a young woman occupying apparently the same position as in the previous experience. I asked if Mr. Blank was in. "No, he is not at present." "Is he expected in shortly, I have an appointment with him at this hour?" She looked up and enquired, "Are you Mr. Lloyd from Detroit?" "Yes." "Well now, if you will please take a seat I will see if I can locate him." (It happened that I had written about three or four days before asking if I could have an appointment that morning. You may draw your own inferences.) Anyway that girl started on the telephone and she did not let up until one after another she called the works, one holder station, then another, and finally the foreman at his temporary telephone on a street main extension. Then she turned to me and said: "He has left the street and that is his last stop, I think he will probably be here in a few minutes," and he was there inside of five.

Another incident that occurred in that same office while I was waiting that morning, was a further illumination of why that company seems to stand well with its consumers. A man came in and asked for the manager. "He is not in, is there something I can do for you?" Do you note the wide awake personal interest of that answer? It turned out this man very much wanted to see somebody quickly as a service gang were seriously chopping into the roots of a tree opposite his new house. "Oh" said the girl at the desk, "I don't believe you want to see Mr. Blank, you know Mr. Jones has all the services in charge. What is the number of your house?" He gave her the street and number, she turned to a card index drawer behind her, ran over a list. "You are Mr. Watkins?" The man's face brightened at once at the recognition, and half of the row he was prepared to make blew out in that instant. She turned to her telephone and something like this conversation ensued, "Mr. Jones, Mr. Watkins is here about that service we are running for him at his new house. He says the men are cutting into the roots of one of his trees. Can you see him if I send him down?" Then she turned to Mr. Watkins, "You know where Mr. Jones' office is? on the next floor below," etc. There was a system that was not red tape and evidently the public of that gas company had been and were continually being educated. Incidentally the manager's time was conserved for his own job.

ADVERTISING.

Alonzo P. Ewing.

A paper presented before this Association in 1911 urged co-operation among the Gas Companies of this State. A plan of progress was suggested to bring about uniformity of advertising, with a consequent better result. This plan did not develop as it was intended, because of the lack of a state-wide medium.

In 1912 a paper on advertising, presented before this Association by Mr. Richard Fowler, gave same valuable advertising suggestions, well worth while your reviewing. It is not my purpose to tell you what kind of mediums to use, what kind of type, what kind of booklets, nor what to sell. I am first going to give you some details of one of the present campaigns we are using in Detroit, to encourage this type of advertising among gas companies.

An able salesman has said that "Salesmanship is giving private lessons, where advertising is giving public lessons." I believe as Knox says, that a successful man must think; must remember; must imagine; must act; and I believe this is true of our advertising.

First: It is to make people think.

Second: To help them to remember.

Third: To stimulate their imagination.

Fourth: To hasten action.

We want the public to think well of us, we want them friendly, we want them to think of us when they want anything in our line, we want them to give gas at least consideration for any operation where gas may be used.

Our advertising should start an argument in their mind which may result favorably to us.

We want them to know us by name, we want them to know us by sight. The broader our acquaintance the more salesmen we have working for us, if we are giving good service.

We want them to use a little imagination, and to realize what it means for us to serve all of the people, even those from whom we receive no profit.

We want our advertising to bring about action, so far as they purchase the appliances that will give them the service that we claim. We want them to have confidence in us so that they will give us their orders. We want them to act toward us as if we were real flesh and blood people, and not just a soulless corporation.

To give them good service we must do what the public wants us to do, and our advertisement should help the public to be patient. We should let them know what kind of service we expect them to get, and urge them to insist upon that kind of service. Ofttimes there is a big difference between what we intend our employes should do and what they really do.

In a talk with a famous dancing master, with 110 years of famous teachers in his family before him, I learned that his big success came in most part from his former pupils speaking well of him and his methods. His advertisements reminded his former pupils that he was still progressing and prospering. He relies upon them to tell their friends the real sales talk.

That is the kind of advertising that we want. That is the purpose of the campaign we are using in Detroit at present. We want to humanize our Company. We want to humanize our organization. We want the public to do business with a lot of real, live folks. We want them to feel that some individual is responsible for errors of omission or commission. If the employe with whom they come in contact, either over the counter, at their home, or over the telephone, does not give them courteous service, we want them to call it to the attention of the head of the department, and our advertising is to let them know the head of the department.

If a meter is not set just as promised, we want them to let us know so that we can investigate the employe who took the order, find out just where it stopped. We want them to realize that a man went wrong, if their request was not given the proper attention, and not the whole Company, and by giving us the information they assist us in bettering our service in the future.

If a telephone inquiry does not receive proper attention, they may be talking to an employe who has not had the proper amount of sleep; who has been so in a hurry that he has come to the office without his breakfast. He may have a headache, a toothache, or some other ache, and we will appreciate it if the customer will ask to talk to the head of the department.

We want to impress upon the public, if possible, that our desire is to give *good service*, and it is partly their fault if they do not get the service we are trying to give.

Each one of our heads of departments has his or her friends, and this series tends to make "boosters" of their friends for our entire organization.

We want our business as personal as the tailor's, as the jeweler's, as the laundry's. You buy shoes where the clerk calls you by name. Your wife buys groceries where they call her by name. You buy clothes where they call you by your name, and make it a personal matter. We must use our customer's name as often as possible.

A complaint from a friend is in the nature of a request. We want to increase the number of requests and limit the number of complaints.

After all, all complaints are requests, if we make them personal. They are much easier to handle, and easier to adjust. I have heard many a company say that their complaint department was really the bad part of their business, and even to-day, many of our customers think that if our office is crowded with people, they are all there making complaints.

To-day we feel that our complaint department is really the nicest part of our business. It is the place where we can make the most friends for our Company. You wouldn't say that because a physician calls upon the sick all day long, he has very disagreeable work. He looks upon the patient as he leaves, and

feels that he has done good, and is helping to cure, and he is a happy man, and he goes about his work with a smile and with enthusiasm.

Just so with our Complaint Department. They have the opportunity to cure the company's sick, and it should be very happy and congenial work.

Our Collection Department, if used as a convenience to our customers, instead of an annoyance, is a valuable department to make friends. Our collectors will be much happier and make more friends if we insist upon equitable adjustment, instead of arbitrary adjustment.

What does this personal equation mean in the gas business, as compared with our general forms of advertising? More than 60 per cent. of all our consumers visit our office at least once each month. It means that we have an opportunity to make our business personal, to plant the seed of friendship with each one of them once each month if we will only call them by their names.

Each advertisement that appears in booklet form, on stickers, or in the newspapers, is carefully scrutinized to see that the wording conveys our meaning and carries our policy. We try to eliminate all useless words. We should carry this advertising policy to our employes, and put into their mouths our policy. Tell them what to say, when to say it, and how to say it.

Statler, the famous hotel man, says that it makes a lot of difference in his hotel the way the doorman swings the door, as to whether the guest feels himself at home, or an intruder. So it is important to consider how we will say what we say, and when to say it. Most customers do not want to be kickers. Many hesitate about making requests, thinking that it will do no good. This personal contact will gain their confidence, and they will tell us how to improve our service.

An able writer says that "Success comes from self-control." If we are to control ourselves we must give more attention to the education of our employes. Give them facts and figures. Tell them our policy and our plan. We must not mistake our impulse for our will; simply think that we are doing things for the public and make little effort to see that the service is what we think it is. Let our employes know that requests from customers to

heads of departments are always investigated carefully and the public given the service that they ask; it is an example to our employes.

I am admitting that this advertising is also for our employes. After all, the public must help to educate the employes. We don't want them inconvenienced, but we do want them to bring complaints that we may know our own shortcomings.

We really *sell service*, and that is what we are advertising. Our own employes are our best advertising medium, and are means of giving service.

The gas business is adapted the same as other businesses to this "personal contact" advertising. Our salesmen make more than 50,000 calls each month upon our consumers. Each call is an opportunity to make a friend. 65,000 visit our office each month, and give us an opportunity to become more friendly. Thousands of telephone calls are handled over our lines each month, and our method of handling these calls means much toward making friends.

SOME GOOD ADVERTISING.

Always talk from the consumer's standpoint.

Repeat his or her name as often as convenient. It helps to make the transaction more personal.

Repeat your own name, as occasion arises. It impresses your desire to give personal service.

Talk in the affirmative, not in the negative.

Always thank a customer for the opportunity to serve. Thank him by name—be sure to give him your name, so that he may get in touch with you again if his request is not properly attended to.

Get the consumer's telephone number. You may need more information, or want to save time by telephoning information rather than waiting to write. He may live in a flat, and the telephone that he has an opportunity to use may be in someone's else name.

Good service is contagious. Remember it is easier to make a booster out of a knocker than it is to make a knocker out of a booster. Once convince a customer that you are endeavoring to do the right thing, and he will help you to eliminate the

knockers. The knockers can't dissuade him, but he can persuade them.

No Company is bigger than its organization. Every employe must do his part.

Satisfy every complaint quickly, and you will have fewer complaints.

The series of advertisements attached it is hoped will accomplish some of these plans. They will help to humanize our organization, and bring our organization to realize we really mean to give good service.

Mr. Dewey says:

"Your good will is our most valuable asset. When you do business with the Gas Company, remember first of all that we are most ANXIOUS TO PLEASE YOU.

One consumer who is happy is worth far more to us than a score who are dissatisfied, and no matter how large we may grow, personal service must be the keynote of this business.

We want you to know that every one of our 1,500 employees is interested to see that your orders receive personal attention.

This Company happens to be so big that it HAS TO BE A CORPORATION, but it is made up of real flesh and blood folks who are just as human as if we were still a one-man concern.

We expect you to demand the best possible service, and please remember that we are just as anxious as you are to have you get it."

Detroit City Gas Co.



V. P. DEWEY.
Vice-President and
General Manager.

Mr. Ewing believes:

that every one of our 110,000 consumers can always be satisfied.

We can set a meter, or run a service in a hurry for anyone when special circumstances call for "emergency" service.

Any difference of opinion must be settled to your satisfaction before you leave our office.



ALONSO F. EWING
Ass't. Gen. Manager.

We believe our employees (at our counter or on the phone) can give you entire satisfaction, and if you don't get it, we want you to appeal your case to the head of the department for special consideration.

Remember that our business is to serve you satisfactorily.

Detroit City Gas Co.

The Secretary says:

That while the cost of living has gone up approximately 50% since 1890, the price of gas has decreased 45% in the same period.

Manufactured gas in Detroit in 1890 cost \$2.00 per thousand cubic feet. In 1895 the price dropped to \$1.25 and it has gradually decreased to \$1.00 in 1898, 90¢ in 1904, 80¢ in 1906, and in 1911 it was reduced to the present rate of 75¢ per 1,000 cubic feet.

Gas has not only HELPED TO REDUCE THE COST OF LIVING, but it has helped even more to REDUCE the labor and ADD to the JOY of living. Where our mothers carried in coal and lagged out ashes, we now light a match and turn a gas valve. Instead of usually oil lamps to trim and clean, we now simply pull a chain to flood our houses with gas light. We can now simply turn the faucet and get gas heated hot water, and soon we will be able to simply press a button and heat our houses with gas.

Detroit City Gas Co.



C. A. RITTER
Sec'y and Treas.

Less "Red Tape"

Your time is valuable—so is ours. "Red Tape" takes time. You'd like quicker action. So would we—and we're getting it, and giving it to you—just as fast as we can!



JOHN H. WRIGHT
Office Manager.

Throughout our whole company we are simplifying operations as much as possible—especially those that have to do with the public.

We are making an honest effort to execute your orders with all the simplicity, despatch and efficiency that should characterize a modern public utility business.

Please do not hesitate to report any delay or lack of attention.

Detroit City Gas Co.

A Supply You Can Depend On



J. W. BATTER,
Gas Engineer.

Little do we, who enjoy the many comforts of the big city, realize how many of these comforts depend finally upon the way SOME ONE MAN does his duty. Just as the battle depends upon the valor of "the man behind the gun," so the lighting of our homes—the cooking of our food—a hundred various comforts—and, in extreme cases, even life itself depends on THE MAN AT THE GAS WORKS.

Our supply—even in single small sections of the city—has hardly been EVEN INTERRUPTED, and has NEVER FAILED to any general extent in all our years of service.

And the pressure and quality of our gas have ALWAYS been more uniform and of a higher standard than is required by the City.

We are especially proud of Detroit, and we shall endeavor to continue a record for Detroit service that shall justify YOUR pride, as a citizen, in the FOLKS who make your gas.

Detroit City Gas Co.

Mr. Moir's Men Read Your Meter



ROBERT E. MOIR,
Manager,
Meter-Reading Dept.

These men are wonders of accuracy and endurance. The average errors in reading seldom exceed 1 in 1,000, and practically all of these errors are caught BEFORE bills are made.

Each man reads about 245 meters a day, or one every two minutes. That means that he must be admitted to your home, in deepest cellar (often to some very inaccessible place), read your meter, record it on his slip, and be out again in two minutes, and keep this up steadily for eight hours a day in all kinds of weather.

Meter readers all wear the Gas Company badge. If you do not know the man who reads your meter, ask to see his badge.

Our men are always in a hurry, but they always have time to be COURTEOUS. We will thank you to report any irregularity on the part of our meter reader to Mr. Moir.

Detroit City Gas Co.

Our Care in Buying Is Your Protection



HARRY J. HOOD
Purchasing Agent

You may be sure that everything you buy from the Gas Company is absolutely the best that can be bought.

We are constantly on the alert to secure the very best appliances that are brought out, and all new appliances are most carefully tested and compared.

Satisfactory gas appliances are our only business builders, and we not only use all possible care in selecting appliances for sale, but we absolutely guarantee satisfaction on everything we sell.

Detroit City Gas Co.

Our Cashier Is Sure



GRANT ESTEP,
Cashier.

That some gas consumers do not realize how much the discount of 10¢ per thousand cubic feet for payment on or before bills are due actually amounts to in a year's time.

The average gas bill amounts to approximately \$2.40 per month and while its discount is only 32¢ per month, this means \$3.84 a year, or enough saving to pay the average gas bill for over a month and a half.

A clearer understanding of this liberal policy would certainly induce all consumers to pay their bills promptly.

Our offices have become so crowded on the last discount days that we urge you, for your convenience, to pay your bill either by check, or before the last discount day—or at any agency of the American Express Company.

Detroit City Gas Co.

Quicker Service



GRACE L. HABIN
Gas Clerk.
Sales Dept.

Gas meters are usually set the next day after your order is received, but we have arranged to give IMMEDIATE service, and set your meter THAT SAME DAY in all special cases where your needs demand, and you are willing to pay for a special messenger. (Usually 80c).

New service pipes are usually run within 31 days of order—but in special cases where you are willing to pay the cost of moving our gang (usually \$8.00) we will install a service in 8 days.

There are always cases where sickness, business or other special circumstances demand E M E R - GENCY SERVICE. This new arrangement makes it possible to give you special service WHENEVER IT IS NEEDED. Ask us to do something QUICK and see how fast we do it.

Detroit City Gas Co.

Mr. Ebel Will Tell You



GEORGE EBEL,
Sales Manager.

"Before you buy or build in a new subdivision BE SURE YOU CAN GET GAS."

"We are constantly having people come to us who have purchased their gas appliances, and are all ready to move into their new homes, when they suddenly discover that the nearest gas main is far, far away."

"We are running miles of new gas mains every month that the ground is open, and it can always be arranged to run pipes YOUR WAY if we have sufficient notice."

"Phone or call on Mr. Ebel, M. 3500, and he will gladly give you full details about the location of our gas mains."

"BEFORE YOU BUILD
REMEMBER THE MAIN"

Detroit City Gas Co.

Our Shop Foreman's Word to the Public



JAMES McMANUS,
Shop Foreman.

"If people only realized," says Mr. McManus, "how many things we do for nothing, and how glad we are to do them; our big force of expert Shop Men would be more generally appreciated.

"We not only set, and turn on and off meters, but we do all kinds of piping (at cost), and we gladly adjust any gas appliance at any time to give the best possible service. We blow out the dirt or water in your house piping, repair any leaks in gas meter or service pipes, and test your gas meter at any time on the basis of you pay us if the meter is slow, we pay you if the meter is fast."

"Don't hesitate to let us know if any of your gas appliances are not working satisfactorily. We have a force of expert gas men who are always on the job, DAY and NIGHT, to make it right."

Detroit City Gas Co.

Our Maintenance Supt. Wants You to Know



ROY A. DAVIS
Superintendent Maintenance.

That we are now taking care of 18,000 gas arc lamps, and proving to hundreds of Detroit merchants and manufacturers that our service is not only better and easier, but also cheaper than trying to take care of their gas lamps themselves.

We take all the trouble and annoyance—you pay us less than $\frac{3}{4}$ c a day.

We are also furnishing a similar service on 20,000 gas lamps in the home for $6\frac{1}{4}$ c a month.

We use the best quality Welsbach mantles and glassware, and have several inspectors who are constantly going over the city to see that all lamps are properly cleaned and kept up.

All requests for special calls are taken care of that same day.

For further information call Roy Davis, M. 3500.

Detroit City Gas Co.

DISCUSSION.

THE PRESIDENT: Mr. Ewing's paper is now open for discussion. Mr. Ewing I think attacks the problem in a very practical way and we would be glad to hear, I think, from anyone.

MR. THOS. R. ELCOCK, JR., Philadelphia: Reference has made to the national advertising campaign and that there existed at this time a lack of available figures that could be used to make comparisons between magazine advertising and the use of newspaper space. This very question is a live one at the present time. Up to now the Advertising Committee and the agency have been worknig on educating the gas man up to the question of advertising. We think we have accomplished this to a great extent and there now comes before us this question as to the best mediums to use. Some of us have held out that it would be much better to use flat magazines. By flat I mean such as The Ladies Home Journal and The Post. A great many magazines are coming over to this form from the old book form and when we come into the question of finally deciding on what magazines we will use, it is very likely that more of the magazines will be in the flat form. We will then be able to submit in more exact figures a comparative cost per line and per inch. I have before me, however, some very interesting figures which have been rather hurriedly worked up in regard to comparisons between magazine space and the Michigan papers, which are of decided interest in this connection:

Take into account an appropriation of \$120,000 instead of \$150.00. The last National Commercial Association Bulletin had some very interesting data by Mr. Wrightington who takes a net appropriation of \$100,000. I split the difference of what we hope to get, and what Mr. Wrightington assumed we will get, and I have taken \$120,000 net. For twenty-one magazines Mr. Wrightington gives a figure (which I assume is correct) which places the average cost per magazine page at \$575. Those same twenty-one magazines will have a circulation in Michigan of 343,000. The Michigan appropriation, as I have gone over it hurriedly, will amount to \$6,736 or 5.61% of this total appro-

priation. That will make the Michigan cost per page only \$32.25 or, for the whole State of Michigan we will buy magazine pages for a thousand readers at nine and one-half cents apiece.

I received a telegram from Mr. Stotz the other day in which he says \$56,000 has already been received representing 135 gas companies and 25 manufacturers. Those men have mostly gone into this proposition on the faith that the thing will be worked out satisfactorily. We are now at a point, I believe, where this proposition can be sold on a business basis. We can now show any man that he can buy this magazine space (which is a far better buy) at from two, three, four or even eight times less than his own cost for the same amount of newspaper space.

I think this Association should go on record as endorsing the national advertising campaign. I am sure you will. Possibly there are some of us who do not definitely understand all of the details. I was told by several men here this morning that this was so and some more expressed the thought that the campaign contemplated mere merchandising and an attempt to simply sell appliances. This is but a small part of what the campaign is intended to accomplish. As it is laid out tentatively, a major part of it is to be used to educate the public. When I saw that a paper was to be read this morning by Mr. Lloyd in regard to educating the public, I naturally came to the conclusion that the meeting would hear three advertising papers, Mr. Ewing's, Mr. Casson's and Mr. Lloyd's. I could not dis-associate in my mind the thought of educating the public from the thought of advertising and the thought was moreover connected with the advertising campaign which will be educating the public in the modern uses of gas. The electric man has acquired his business, to a great extent through national advertising. showing that it is the very last word in lighting or to whatever use it is to be put. In Philadelphia our electric friends have a slogan which they place in every available spot "If it isn't electric it isn't modern" and that is good advertising. We must build our business up to that point that reflects in the minds of the public that gas is not a back number and to do that we must educate the public by national advertising. The Electric Association has now

practically completed the raising of a fund of pretty nearly \$200,000 and they very soon will be taking space in many of the magazines in the United States and Canada. You can feel assured that their copy will be educating the public in regard to how modern electricity is. The British Association has just completed one year of national advertising which has proven amply profitable and it is certainly up to the gas industry in this country this year, if possible, to start educational copy in the national magazines, copy that will show that gas is not only modern and that the appliances that are used are efficient in every way, but that the gas companies are practically the leaders in good service to their consumers. This latter phase is a fact. Gas companies have really been paying better attention to their consumers than any other public utility in the country and it is important to tell the public about this. As an instance, the educational campaign in Philadelphia carried on by the Philadelphia Gas Works proved splendid publicity. It was carried on under the title of "U. G. I. Service" and we told our public what we do and how we do it, the care we took to give them the best gas at proper pressure, our constant vigilance and many other points that would give them the impression of good service and that they were getting the best of gas and the best attention of any consuming public in the world. We heard many comments and still hear them, such "I never knew you did such things," "Why have you not told us of this before?" We, as gas men, know what we do. We know the care we take to deliver gas at the proper pressure and all of the various methods we take for absolute safety, but the public does not know this. How are they going to hear about it? Are they going to learn it from our men who go around through the houses, our salesmen and our fitters? We must go to them and tell them and drill it into them until they become assured as to how sincere the gas company is in regard to their interests. And when we come to a franchise fight or a rate decision, all of this knowledge on the part of the public and this favorable feeling will be of inestimable value. We won't be rushing at the last moment trying to tell them all of these things. It takes time sometimes to secure the

public's favorable opinion should we be so unfortunate as not to already have it.

This national advertising is to point the way to a better understanding between the public and the gas industry and it will take up very strongly this question of good service and what will appear in the national mediums can be tied up to local advertising so that each of us locally can say "Detroit is doing this" or "Kalamazoo is doing this and we have done it and we will continue doing it." It will convince our local public that our gas company is meeting them more than half way and that it is one of the modern gas companies working hand in hand with this national advertising. There are many little points of service to the gas man in this national campaign. A company not having its own Advertising Department will welcome each week newspaper copy sent out from the central agency that will work in unison with the copy appearing in the national media. In addition to this, there will be booklets, folders and stickers and various other forms prepared by what we think is the best advertising agency in this country which can be bought by gas companies at cost. The writing of copy for such forms as these will, at all time, be under the direct guidance of your Association through its Advertising Committee and Board of Directors. There will also copy appear in trade papers, in the hotel trade paper in regard to hotel appliances, in the candy journal in regard to candy appliances, etc. Whenever this advertising scheme has been placed before a State Association, it has met the unqualified endorsement of the men assembled. The Associations of Iowa, Pennsylvania, New Jersey, Wisconsin and perhaps others that I cannot recall at the moment have all endorsed the campaign. It does not mean a financial obligation in any way, but merely means that your State Association has confidence in the parent organization and endorses their plans for this progressive movement in our industry."

THE PRESIDENT: Is there anyone else who wishes to add anything to this discussion?

MR. HENRY W. DOUGLAS: I have watched with interest ever since this national campaign started, since it was first thought of, and it seems now as if it were nearer culmination than ever before. In fact, it is almost a reality. I, therefore, move that it receive the endorsement of this Association. I think everything of this kind will probably help it on its good way.

THE PRESIDENT: You have heard Mr. Douglas' motion that this national campaign of advertising be endorsed by the Michigan Gas Association. Is this motion supported?

MR. ELCOCK: I second that.

THE PRESIDENT: It is now open for discussion, or if you would prefer to postpone consideration of this until a later session, giving an opportunity to think it over and talk it over informally, I think perhaps that would be a good plan. I would like to ask Mr. Douglas how he feels about that? Doesn't he think if this matter were postponed until a later session that it would give an opportunity for informal discussion amongst the members before taking action?

MR. HENRY W. DOUGLAS: That will be all right.

THE PRESIDENT: If any action is then taken it certainly will carry a great deal more weight than any snap action that might be taken at this time. I think we will do that if it meets with your approval.

MR. HENRY W. DOUGLAS: Certainly.

THE PRESIDENT: This matter will be brought up for discussion at a later session.

Mr. Ewing, have you anything to add in concluding this matter?

MR. EWING: No.

Thereupon the first session adjourned.

Thursday morning, September 18, 1913

THE PRESIDENT: The Secretary has a telegram which I know you will want to hear read.

THE SECRETARY: Last year when on our boat trip we spent a day in Toronto and Mr. Hewitt, the Manager of the Consumer's Gas Company was responsible for giving us a very fine time, and we sent him a telegram especially inviting him to be at this meeting, and I have just received this reply:

"Please express my thanks to the Executive Committee and the Association for their kind message. Am much disappointed in not being able to attend your convention. Had fully intended to do so. Accept best wishes for successful meeting and best of good time."

"Arthur Hewitt."

THE PRESIDENT: I am sure that every member of the Association, especially those who enjoyed the hospitality of the Consumers' Gas Company at Toronto last year, deeply regret the fact that we have not Mr. Hewitt with us, and we all hope that the time may come when we can reciprocate in some way for the hospitality which they extended to us last year.

THE PRESIDENT: We will now have the report of the Gas Fellowship Committee which Mr. Batten promised he would have ready for this morning's session.

REPORT OF GAS FELLOWSHIP COMMITTEE.

MR. JOHN W. BATTEEN:

It is a matter of very considerable regret that the Gas Fellowship Committee is unable to report any paper for this Association this year. Each year for twelve successive years, a paper has been presented, among these twelve being many which mark a distinct advance in our industry.

Despite that fact however, that there is no paper to present, Professor White and his fellows have been diligently occupied with a number of matters important to our business. One of these has been the continuance of the weathering tests on coal, this making the second year during which these coals have been subjected to outside weather conditions and have been under observation. Tests carried on during these two years have apparently not developed any definite depreciation in the coals. It was not thought advisable, however, to make a report on these tests, inasmuch as the data obtained is not entirely conclusive. These tests will be continued throughout the five year period originally planned, and it is planned to present a report to this Association as soon as sufficiently definite and conclusive results are obtained. The most important work has been done on the problem of the electrical separation of tar. This field offering a very promising opportunity for observation and a very considerable advance has been made along this line, a large amount of data having been accumulated. The results so far obtained do not warrant the presentation of even a serious progress report. The continuance of this work is planned for the coming year and it is hoped that it may be carried through to a definite conclusion.

Thanks to the financial genius of your secretary, your committee has been supplied with sufficient funds for the past year for carrying on the work planned a year ago. We estimated that \$1,000 would be required for the coming year, \$750 being used to pay the holder of the fellowship and his co-worker during one-half the year, the other \$250 being used for incidental expenses. It is the desire of your committee that, if you see fit to do so the raising of this \$1,000 for the purposes of scholarship, be approved.

THE PRESIDENT: Now, at this time, it seems to me proper that a word should be said with regard to the work that has been done at the University under the auspices of the Michigan Gas Association. I did not come prepared to say anything about this, but Mr. Chamberlain has called attention to the fact that we have quite a large number of new members who, perhaps,

are not familiar with the history of this Fellowship Work, and who perhaps do not realize what that work has meant to the gas industry, to the Michigan Gas Association, and to a number of men who have worked in this connection at Ann Arbor. This Fellowship was founded, I think, thirteen years ago, and is supported by the subscriptions of gas companies in the State of Michigan who have amongst their personnel members of the Michigan Gas Association. It is not intended to be a direct money making scheme, but it is intended exclusively for research work which in turn is expected—and I think the experience of many of us is that the expectation has been fulfilled, to ultimately result in enabling our companies to get better results technically and commercially. In order to carry on this work it is necessary to have certain sums of money which have varied at times from, I think, seven or eight hundred dollars up to about twelve hundred dollars. This money is spent entirely in paying the expenses of the holders of the Fellowship and on the necessary apparatus to carry on the work. The Ann Arbor Gas Light Company has made what is unquestionably the biggest contribution to the work. They have provided a place to work and they have permitted the Fellowship work to be done on their premises, which oftentimes means more or less interference with the regular operation, for the general good of the industry. Some of the work that has been done has acquired a world-wide reputation. There is no question that the science of gas making has been distinctly advanced as a result of this work. Our Association is the only one which is devoting so much attention to special research work in connection with any University. It is peculiarly fitting that this should be done at the great University of Michigan, which is one of the oldest and one of the leading state universities. I can only speak for this work that everyone, when he goes home, will see to it that Mr. Chamberlain's seductive letters asking for the usual contribution will be responded to promptly. We can assure you that the money will not be wasted. It will be like bread cast upon the waters which some day will return—what is that scriptural reading, Chamberlain?

MR. CHAMBERLAIN: You have said enough of it. They will know what it is.

THE PRESIDENT: The next thing in order is the great treat of this meeting. We have with us to-day a gentleman who is going to make our hearts beat a little faster, and who is going to send us home better prepared to do business and get results than ever before. I am not going to take up any time that should belong to Mr. Casson.

“HOW TO PUT GAS ACROSS.”

Herbert N. Casson,
Vice-President H. K. McCann Co., New York.

Mr. Chairman and Friends of the Michigan Gas Association:—

Excuse me for piling up a little edifice here. You know when God made me with fifty-inch legs he made me so I can't make use of an ordinary table. Seeing that the Chairman began in appropriate and solemn, if somewhat interrupted, fashion with the quotation from the Bible which he has not remembered from his youth up, I think it would perhaps be appropriate for me also to take a text before I begin the sermon which I am about to deliver. I will take a text from the gospel according to Warren S. Blauvelt, first chapter and last paragraph, forty-seventh verse, “Improve the environment of the industry.” Now there is a thought so big that it would take twelve months’ thinking to get it all out. What I am going to say, in my own somewhat peculiar fashion, will be all aimed at that one thing, to bring out a sort of exhortation on that text, *“improve the environment of the industry.”*

You know this wonderful State you have here is a State of new opportunities. It is a State of surprises. Just think of what Michigan has done. When she has done one thing she turns right around and does something else. The fur traders thought they had it all cleaned up when they killed all the bears and wild cats and wolves, and then along came the lumbermen and they made ten times as much out of the lumber as the hunters had made out of the pelts. The lumber men got some big fortunes and raised some worthless sons and grand-sons and they

thought everything was done. They had made all the easy money, and they had made a lot of lumber and a lot of loafers and they had accomplished their God-sent mission in the world, you know, when along comes the report that some one had discovered iron ore, and they went north and got a hundred times as much money from underneath the ground as the lumber men ever took off the top. The fur traders got one dollar, the lumber men got ten dollars, and the ore men are getting one hundred dollars. Now, the work is still going on. I see a man up here at Bay City took a stump and put it in a lemon squeezer and squeezed out turpentine, isn't it. Oil, turpentine or something or other, any way, I know he is getting five dollars worth of something out of the stumps.

Now, here come the gas companies. I hope that we can fix it so it will come to pass that Michigan will lead the way in this matter of gas, because I want to say, right off, that you gas men are in the woods and you don't know the way out. You can make gas all right, you are wonderful at that, but there is not a salesman in your whole bunch. You have never appreciated salesmanship. You have never put yourself right with the public. You are letting the public do all manner of things to you; you are letting yourself be the football of every Legislature. Any fool that happens to get elected can come and smite you on your cheek and God help us if you don't turn around and let him smite you on the other side. You haven't learned how to handle the public.

As I have said before, there isn't a man of you who can get elected to any office in his home town. Now, what about improving the environment of the industry? You see, the environment of the industry will never be improved until you can be elected to the chief office in your home town. Why shouldn't you? Honest, hard working men, every one of you, earning your money just as honestly as any hod-carrier that ever hod-carried, and yet you are so unpopular that any fool in the town can be elected by the public quicker than you can, to any kind of office. Popularity is something that you only dream of but never experience.

The public and gas corporations are natural friends. My finger and my body are natural friends. Suppose I cut off that finger? What happens? Would the body not be worse off without the finger? I can't feed my body quite so well, because I have only got three fingers and a thumb on this hand, and the relations between the body and the finger and the gas corporations and the public are just the same. The public has never recognized that, and here we have gas corporations in every State in the Union endeavoring in spite of the hoodlumism of politics to better their position. I was in Denver the other day and in going over the laws I found twelve hundred and fifty bills in the Legislature. One of them was for the protection of bung-holes. "Resolved that no person shall have in his possession a keg the bung hole of which is open." I asked several bartenders and I couldn't find one in Denver who knew what was meant by the protection of bung-holes.

One of our Bowery statesmen introduced a bill at Albany the other day to protect us from all bad oyster stews, "Resolved, that there shall be fifteen oysters in an oyster stew." That is about the sort of bills that are going in. New York has two governors just now and neither one has sense enough to pound sand. That is New York. Here we have these dangerous political factors of decay and destruction and disintegration. Everything that builds itself up strongly has to contend against the forces of destruction. Put a piece of fresh meat on the sidewalk and the microbes begin the very minute you leave it. You build up a corporation and the very moment it is strong, the microbes of decay disintegrate it. You have got to preserve it with salt to keep it from putrefaction. The motto of the average Legislature is "Back to the push cart! back to the candle!" It is a wonder that they don't make the manufacture of gas illegal. Most of our laws are based on the fool decisions of the Middle Ages. They are trying to push us back in that direction. What does the law know about the future? Nothing. What does the law know about the present? Nothing. All the laws are based on decisions made ten, twenty years ago, sometimes three thousand years ago. That is law. We have got to recognize what law is. Law has got nothing to do with the present. Law is

blind. It doesn't see what is about to happen. Business does. Business sees the present, has no use for the past, pushes towards the future. Law sees not the present and pushes towards the past.

In this country we have been fooled a long time with politics. Here in our own republic if there is a fellow in the community that you want to get rid of, you elect him to an office, get him out of town anyway so he can't borrow money from you any more. We send him to the State House, or make him consul or ambassador, any way send him where he will borrow money from foreigners. So we regard politics as a kind of general sanitarium for the "no-goods." No wonder we are catching it. We have to put things on a different basis. How can we build up a stable and solid business structure when we are in a state of political fidgets? They are talking about school reform, currency reform. Why not chloroform? I don't know what would do the country more good than to chloroform most of the legislatures. Socialism, free trade-ism, progressiveism, rheumatism, or any ism that anybody thinks of, is immediately put out on the country. We are like the lightning bug that the poet sings about:

The lightning bug is flashy,
But he hasn't any mind;
He wanders through the darkness
With his headlight on behind.

How to get gas across! In the first place we have to get it across by studying salesmanship, by finding out how to sell goods. Salesmanship used to be thought to be nothing very much. If a fellow had the knack of traveling on the trains and getting favors from nigger porters he was made a salesman. If he spent lots of money easily and didn't have a very great sense of responsibility, he was a salesman. Now, we are beginning to study salesmanship and we are finding out that there is nothing much more difficult. That is a great big problem. It is just as big a problem as manufacturing or engineering. It takes a bigger man to be a salesman than it does to be a lawyer, because a salesman has got to have brains and a lawyer can have some

books. It is a great deal more serious when a salesman makes a mistake, because it means a funeral for the company as far as that customer is concerned. When a lawyer makes a mistake he tries the case over again. That is what he wants. When a doctor makes a mistake he buries it and when a minister makes a mistake nobody knows the difference. When a plumber makes a mistake he charges twice, and when a judge makes a mistake it is the law of the land. But when a salesman makes a mistake he has lost a sale. There is a customer's funeral immediately, a cash injury to him and to the firm.

We find out it is a pretty difficult thing, this matter of salesmanship. Man is the most wonderful piece of mechanism that God ever made and forgot to put directions on. Every other machine has got directions. But a salesman has got to take this complex piece of machinery, belly, brain and breath, lung, liver and lights, all invisible, can't see the works—Gee! how often we wish we could see the works. We would then know how to handle some fellows. Some fellows' wheels are square, do you know it? But we have got to handle them. All we can do is to look them in the eye. We go ahead and when we go wrong we dodge around, side-step to something different, watch them, follow them, try to find out what their works are made of, how to talk to them and not to talk ourselves. At first, when we went out as cub salesmen, we used to go in and say "Here is my card. I represent J. T. Smith Company. I am selling so-and-so." Nothing doing. Worst possible thing—coming at a man wrong end first. Backing into the man and slapping him in the face with a wet towel. What does he care for *me*? To-day we know better. We come in and we don't mention our business. We come in and we make sure we know the man's name before we talk to him. "By the way, is this Mr. Smith?" If you ever say that, you are not a salesman. If his name is Smythe and you call him Smith, it is all off. You have got to get his name right. Get it right from the clerk before you see him. You don't want him to think you never saw him before. Make believe you did. I never let a man think I am a stranger. Nobody does business with a stranger. "How do you do, Mr. Smith?" He thinks I met him on the train and

maybe I bought him a cigar, or I met him with a bunch of fellows and we had a drink together. How does he know? I act as if I had anyhow. That is the idea. I want to get in his mind that he owes me about forty cents, and if I get that in his mind, I have got a mortgage on him. "How do you do, Mr. Smith? Very fine morning. I noticed that your window is dressed nicely. Do you have a professional window dresser?" Now, he owes me \$1.40. "I notice things are coming your way, they are raising your taxes. You know you rich men are catching it." Now, he owes me five dollars. Little by little, you see, you go on and talk him. Get his name right. Talk about him. Then when he has a doubt in his mind as to whether or not I am a cousin of his wife, why then, incidentally, little by little, I let him know just exactly who I am and just what I have got to sell, and before he knows it he is talking me and I am getting his order.

If you have ever seen the great Lusitania being pushed into the dock by the little bits of tugs you will see the finest example of salesmanship in the world. The great big Lusitania and the little bits of tugs! Do the tugs come head on with a card, "This is my name. I am tug, John B. Smith." If they come on against the Lusitania they wouldn't know what hit them. They come up going in the same direction first and slip along side of her and without a bump—they can't afford to bump her and neither can a salesman afford to bump—they come in along side of her—chug, chug, chug, chug, chug, and the Lusitania never knows what happened to her until she gets pushed in the dock. That is how to handle a man. Don't let him know what hit him but put him in the dock. Never give him a jar, never give him a bump. "I am Mr. So-and-so"—cut out all that. The first commandment of salesmanship is that nobody in heaven, hell or earth cares for *you*. That is the first commandment. Nobody cares for you. Nobody wants to hear the story of your life. You have got to go around and get the story of other people's lives. You have got a mortgage on men if you can get them to talk themselves. You being a salesman and being above the ordinary man, being in a higher class and a wiser class, let them talk themselves. Get a bigger ear than a tongue. Learn

to listen more than to talk. More sales have been lost by talking than by anything else. The one thing every man loves to do is talk about himself. Let the other fellow put across his story and once he has done so he has thrown the door open to you. There is no one he can tell it to but his wife, who will listen in an interested way. That is why most of us marry, because we get tired, as old bachelors, going around trying to put across the story of our lives, and we get married in desperation. We stand marriage and everything connected with it. Why? Because we can go home every night and tell our wives what big things we did during the day.

I happened to be a salesman when I was twelve years of age away out West in an Indian store. I used to have to sell goods to Indians. I worked in one of the first stores in 1881 down in the Red River Valley. In that Indian store we were taught to sell Indians in this way. When the Indians came in we talked about the days when he shot deer, or whatever big things he did. "You Big Indians!" That was salesmanship. I didn't talk the goods as much as I talked the Indians. Since that time I have landed three presidents of the United States in the same way. Talk to the president of the United States and put feathers in his hair and he is an Indian. He is made of the same kind of material, no matter what clothes you put on him. "Mr. President, talking of your second term," Talking of your second term—pleasant, nice thoughts. He likes to have people come in and talk about the second term. The third day after any president takes office in the White House, the main thing he thinks of is his second term. So, handle each man according to his own point of view, don't you see! After that, what shall we do? Next bring in the goods. Make the goods talk. There is the difficult thing to do in your business, because you can't carry it around in a box and say, "if you will just smell that." That wouldn't do any good. That is what you have got to overcome. If any of you can find some way of making gas smell like perfumery, you will do a great thing for this business. If any of you can find any way of making gas visible you will do a great thing for the industry. When you are talking to a man you have got to show him something. You can convince him through his

eye better than through his brain, because his eyes are a hundred times more active than his brain. His brain is cold molasses but his eyes are quick. Don't talk to a man's brain. I never do because I may be talking to nothing. At any rate, he has a pair of eyes. I talk to his eyes. If you are selling glasses show him the glass and keep it moving, because it is hypnotic. His eyes have got the follow you. Hold it right up (indicating). "You see how even, how symmetrical" and you keep it moving. He thinks that any minute a rabbit is going to jump out of it, as you keep it moving. His eyes are fascinated. If the glass could open a little glass mouth and say what it is, that would be a grand thing, but as the goods cannot talk you have got to make the goods act in dumb show. You have got to make the goods talk like dummies. Always show a man something and keep it moving before him. Have something that represents the business at its highest point, something that represents the business in a favorable way, something that looks desirable or bright to the man's eye. Put a little red in it. If I were selling this glass I would put a little round disc of red on the bottom. People are just like bulls. Wherever they see red they have got to look at it.

To-day we are carrying around big pads with big blue crayons, and when you begin to talk with a man, you say, "Now, Mr. Smith, you see, for instance, here is your store." Always put his store in the middle. If you put it on the edge you have lost a sale. That is a funny fact but you go and try it. Put it on the edge and you have lost the sale. Here is the second commandment of salesmanship—every man is in the middle of the world. See? Every man is in the middle of the world. It is a delusion. It is not right, but everybody thinks he is in the middle of the world. A salesman has got to get over that. If a salesman thinks he is in the middle of the world he can't sell goods, because that is what the customer thinks. He thinks "here I stand in the middle of the world. The earth is directly beneath me. The universe is circling all around me. I am in the middle of the world." It is a delusion, and we all have it. I never saw a man yet that wasn't in the central State and the central city and the central part of the world. If your customer

thinks he is in the middle, put him in the middle. Then put his competitors on the edge. Put his competitors on the edge somewhere, about to tumble off. You can land nine out of ten men by putting them in the middle and their competitors on the edge.

If you appreciate a man you win him, because we poor lonely human creatures go through life with no appreciation. Everybody misunderstands us. Nobody takes us at par. "I know I did my best and just think what they think about me." So appreciate your customer. Give him back his own thought about himself.

In handling people in bulk, as you do, they all look alike. They appear like a whole lot of cattle driving through, and by and by you begin to think the public are a herd of cattle. Most of you do think that. That is where you get into trouble. The immense loss that comes to the gas company through bad manners can never be counted. The immense loss by your treating people as cattle and not as people can't be counted. Most of the bad laws that go through the legislatures were proposed by people you snapped at and snarled at and bit at over the counter. I was in Buffalo the other day and I watched the gas company to see how it was treating the public. A very pretty young lady—she was unusually pretty, came up. She turned her head for a few minutes and looked at some one at the door, and the clerk at the window whistled to this young lady. Think of it! Treated her like a dog. Very nice young clerk, you know. He had the latest Arrow collar on, but there was nothing inside the collar or under the hair. That little Jimmy Pinhead, do you know what he was doing? He was making twenty enemies a day right straight along. Instead of that, his name should have been on the wicket—Mr. Jim T. Smith. Better call him Jim; he is too dignified anyway, and the young lady would say "Mr. Smith," and he, noticing the name on the bill, would say, "How do you do, Miss McGowan?" Did you ever hear it done? I never did. I never got called by name by any gas clerk in my life. If I ever had gotten treated politely I would have remembered it and put a white chalk mark on the place on the pavement. "How do you do, Miss McGowan."

There ought to be standard instructions for the clerks and inspectors who meet the public. You have skilled engineers to deal with machinery. You have men who take courses of instruction in handling machinery, but you do not have them take courses of instruction in handling the public. The result is that experts handle machinery and amateurs handle the public. Your men are not company trained at all. Any young fellow that comes along, you slam him into the window and show him a list of prices and let him go ahead making twenty enemies a day. These men are the finger ends of your company. Cut their nails. Why should they go on scratching the public until the public in some towns have scabs all over their faces? Naturally when they get clawed in the face, they go and propose some kind of a law. Why don't you cut your own nails? Whenever your finger ends come in touch with the public, see that they are trimmed and manicured. Don't pattern after hotel clerks. The hotel clerk has got a profession entirely to be developed. You will find it in Switzerland, but you won't find it in the United States. To be a good hotel clerk every one who leaves the hotel ought to have pleasant memories of the clerk and pleasant memories of the hotel. You have got your gas clerks and your gas inspectors and all those who come in contact with the public. It is just as cheap to be pleasing as it is to be disagreeable. Most of your troubles come from not treating the public properly. You can't fight the public. The corporation that fights the public has no sort of chance. You can't get away with it. The public is to you what the sea is to the fisherman. You can't ever be big enough to fight the public. Just as the great Titanic, the most monstrous vessel ever built by human hands, was hurled in a few swift minutes to the very bottom of the ocean by the merciless sea, just so the biggest corporations can be hurled down to the bottom of oblivion by a merciless public. In this country we talk about a democracy and the rule of the people, but the public has no mercy. The public boosts Dewey up to-day and slings him into a coal scuttle to-morrow. The public has no mercy. Very often it has no appreciation unless you teach it. The public will watch your funeral go by and pay no attention to it. The public would see every gas main torn up

and every gas office closed and would be amused at the performance. If we were to advertise a grand bonfire of the Pontchartrain Hotel we would have fifty thousand people come and see the grand sight. That is the public way. That is the public. The public likes to see something smashed. The public loves a dog fight. They love to see something broken. We have to protect ourselves against the public which would put us out of business without any hesitation, which would cry "down with the rates" and "up with the taxes" until between the lower rates and the higher taxes, it would squeeze us into bankruptcy. Then the public would say "Hurrah! Hurrah! I am glad that damn company has gone out of business." That is the public. The public is just like the sea is to the fisherman. The sea gives the fisherman his fish and the sea in the end may give the fisherman his death. The fisherman pays the cost of fishing in the sea.

Now, we needn't fool ourselves in this country any longer. The survival of the fittest means the survival of the man who knows how to protect his interest. You very rarely meet the men who know how to protect themselves. "I am big enough; nothing can hurt me." Those men have got to go down just as a leaky boat goes down. The public thinks you are privileged. The public is wrong. You are privileged only to have a very hard job that nobody wants. The public thinks you are dangerous. Where is the danger of selling people gas instead of candles? The public thinks that you are expensive. You are one of the cheapest things that the public has to deal with. You are far too cheap. The public is wrong in these things. The public has got to be shown. You have got to take the grouch out of the city in some way. A corporation can be hammered and hammered at by some irresponsible newspaper reporter, some little cheap-jack, half-drunk reporter, until he can put any one of your companies to the bad. That is the power of the press. Any little Tom, Dick or Harry who has not got credit in any bar-room can put stuff in the paper that makes public opinion. Let us face the facts and proceed. That is what the newspaper is, and that is what the public is, and you have got to handle the public in such a way as to take the grouch out of the public. Here are these men running about seeking public office, and how do

they make themselves popular with the public? By hammering you, by hammering everything in the universe that is worth while. The easiest way to get up is to holler "Down with them." That is grand copy. When you say "Up with them," the reporters don't take it down. If I were here talking against some railroad I would have twenty reporters and I would have front page stuff. As it is I am going to have the seventh page with a half a column instead. I am talking up. That is the newspaper point of view, and I am telling you about it from many years' experience. Now, we have got to face the facts. This sort of everlasting knocking, knocking—you know a knocker is a suit of clothes walking around empty. A knocker is like a leak in a boat. The devil was thrown out of Heaven for knocking his home town. The place where he went to is the only place where knockers ought to go. Now, we have got to take the grouch out of the city. We have got to handle these papers that can do so much damage, and get right after them. Go right into the newspaper office and track the man down who started the lying rumors. He puts in the paper that you made twenty million dollars last month. He was drunk and put on three ciphers too many. You made twenty thousand dollars or maybe you made a loss. What does he care? He gets four dollars a column just the same no matter what he puts down. He spins it out. In spite of all these sorts of rumors we have to build up the facts. If you stand back and ignore the papers you ignore one of our most powerful forces for molding public opinion that exists in the country. You can't ignore the press. The papers shape our opinions. They give us the data by which we think. Here are the logs and there is the saw mill out of which come the lumber piles every day. We have got to take that into consideration and feed the truth to the papers.

Make the gas company personal like the gas company does here in Detroit. It is a very excellent idea. Here is a picture of Mr. Moir. Doesn't he look like a genuine catch? He looks like a fine fellow. He looks handsome. Even his wife would say it is good enough. If he hasn't got a wife there are lots of girls after him. Now, that is the kind of thing. Talk about Mr. Moir, not the gas company. Nobody cares for a company.

A lot of fellows know Mr. Moir and every time an ad. like that comes out you cinch forty customers. When those men think of the gas company they think of Moir's company. Such is the development of good will. This is undoing what Bill Pinhead does at the wicket. This is making friends and tying up Mr. Moir's friends. Print photographs in your advertising. Let people see what you look like. Be sociable. There is nothing more inefficient than dignity. Dignity ruins more men than drink. That is saying something. Every time you strut your company gets a big setback. Every time you strut you make enemies for your company. Every one of you should cultivate a sort of Chauncey Depew air. Every gas company should have a public jester. It should have a cheerful idiot, a kind of Frank Daniels with a funny face, a man who looks like Bunny, preferably a fat man, a fellow that knows everybody. You don't want him to do anything else during the eight hours of the day than go around and say "Hello Bill, how is the baby? I heard it was twins last night." Just send him around the street. Nothing but a handshake or a smile, just a good fellow. Everybody knows he represents the gas company. Better to have that kind of a front on your gas company instead of a frozen president sitting up in his private office where you have to interview four boys and three clerks before you can get to him. "Very busy to-day, not in." No wonder the reporters swat you. You ought to be hit. Better hire a sociable fellow and send him up and down the street making friends. The public will say, "Well, that gas company representative is a pretty good fellow. I will tell you a story he told me." A funny story that came from the gas company—wouldn't that be great. They would just go all over the city—the stories that your public jester would tell to the people. He would get the best stories first. He would run out and get the first copy of Everybody's Magazine, get the funny stories and tell three of them before anybody else would get onto it and put them across. He would see some fellow who had just got electric light. "Got money to lose?" Why, he would do more good than your most solemn salesman. He would just drop a few little helpful ideas. "Getting extravagant, why don't you use gas?" He would have the whole place rise

up and call you blessed, because he makes them laugh. That is the public. Caesar knew that long ago, and that is the reason the Roman empire held on for seven hundred years of great prosperity, because the Caesars knew enough to give the public games. You don't give the public games. When did you ever take the public to a baseball game? Never. That is why Caesar kept on being Caesar seven hundred years. That is why this republic has its great problem, whether we are going to go on seven hundred years or whether we are to come to a grand funeral before half that time, because we don't know what the public wants. You have got to give the public their games. You have got to give them what they want. They think a corporation has no sense of humor. They are right. You haven't got a sense of humor. Get a bump of laughter developed. They think that a corporation has no soul. Most of them haven't. Why can't they have souls? Why can't they have hearts? Once in a while when Tom Smith whom everybody knows in Grand Rapids gets struck by a run-away horse, when Tom springs out in front of the horse and grabs it by the bridle and he is dragged by the horse three blocks and the horse tramples out his life, so that when they find him there is nothing left but just two hands hanging onto the bridle, and all Grand Rapids is thrilled by the heroism of Tom Smith who leaves a widow and four children, and the Gas Company jumps in the paper the next morning with this statement: "We will give Mrs. Smith and her family free gas for ten years and we have sent her a check for one hundred dollars!" Never in your life. The idea never came into your mind. Why don't you think about it? There is your chance and you don't know your chance. That is why people hate you out of existence. That is why you can't be nominated for any office. Wherever and whenever the public heart is stirred by some tale of heroism, for God's sake you be the first to the widow. Beat it to the widow.

What else can you do besides developing this science of salesmanship? You can call in the power of advertising. Advertising is a wonderful thing. Advertisers spend six hundred million dollars a year in this country. Every day we spend two million dollars. That is four tons of gold, eight thousand pounds

of gold, every day, a thousand pounds every working hour spent in advertising. Why is it spent? Because it is a way to get more business. The average cost of advertising is about thirty-five dollars per family. Business men and manufacturers use advertising because they have found out that in the long run they can't build up their business without it. Advertising makes National habits. We taught people to use bath tubs instead of going out in the rain. We taught you to wear collars. Every man here has got on a white collar and pretty near everybody has got on socks. You learned that through advertising. I know where I was brought up we never had white shirts, and the first one that came through our village we threw mud at. We didn't like the dude with the white shirt in our village because it was a kind of reflection on the rest of us that had never seen it before, and so we threw mud at the dude with the white shirt on. To-day, through advertising, everybody wears a collar and a white shirt. There is nothing worth while but what you can sell it by advertising. You can sell any kind of land and near-land by advertising. They are selling land down in Florida by the gallon by advertising. They are selling the Everglades. They sell the land and then tell the people to take the water off and they will have their land. They can do it by the power of advertising. They can sell people what the people never saw. They are selling the desert out there in Arizona where they have got to put the water on the land before they can do anything with it. They are selling land in Alberta where they have to dig the snow off before they can find the land. You can sell the Atlantic Ocean, you can sell the desert, you can move the public anywhere. There is no class of the public that can't be moved in the proper way. The San Francisco earthquake made every cripple in the city run three miles. You can move anybody. The power of advertising can do it.

The last time I was in Grand Rapids they didn't know as much about advertising as Detroit does. Detroit was very wise. Detroit has been a selling city. The salesmen have always kept ahead of the manufacturers. In Detroit they were selling automobiles seven years before they had them. They had something that they sold for automobiles. They kept ahead of the

manufacturers, but finally the manufacturers caught up and now they do have automobiles. They put automobiles in the class of cabbages and ripe fruit—perishable. It is actually wonderful when you think of it. When you buy an automobile you pay twenty-five hundred dollars. You pay it right off. You don't buy it on the installment plan, but you pay the twenty-five hundred dollars right off even though you have to put a mortgage on your rocking-chair and everything you have got. The salesman says, "We guarantee it for a year. We are not dead sure for a day, but bring it back in a year. Maybe it will run a year." Twenty-five hundred dollars! It may smash going around the corner. They put it in the perishable class and they got it across. No man ever sold houses in the perishable class. Up in Grand Rapids the poor fellows can manufacture but they can't sell. They make the most wonderful furniture in the world. I never saw furniture like they have in their display rooms up there. It beats anything you have in Detroit, or in Wanamaker's, or in Marshall Field's or any other store in the world. I think it has got the Kings of France beaten. I don't think France ever made such things. I have seen some of the palaces of Europe and I never saw in any palace in Europe such fine furniture. But what do they do in Grand Rapids? They sell a man a set of parlor furniture and say, "This will last you all your life, and will last your children," and so on. That is not what to say. Why don't they get the people into the habit of changing parlor furniture once a year? The automobile men do. Every year the owner of an automobile has to change his machine. Every one of you that has a machine, what is your story? "Well, you know, first I bought a Chalmers but I didn't like the mud guard and then I got a Packard. Somebody came along from the Locomobile people and I bought a Locomobile." That is the average story. If I had the machine for seven years I wouldn't tell anybody. I would be ashamed that I had the one machine so long. It isn't the fashion to say that. The fashion is to say, "I had to change. My wife's aunt didn't like the plush, and the kid took objection to the carbureter, and so I changed my automobile." We have got to get a new machine every year because the new carbureters are half an inch shorter, or they are painting the new cars green and

I am Irish and have got to change. Any automobile salesman can give a hundred reasons why I ought to change when I have run my machine six months. In Grand Rapids they have got to wait until a man breeds before they can sell any more furniture to that family. You see, it is thirty years between sales in Grand Rapids and twelve months between sales in Detroit. There is the difference. They don't know how to sell in Grand Rapids. All the salesmen ought to quit and come down here to Detroit and learn how to sell.

Remarkable things can be done with advertising. A historian can take a man when he is dead, he can take George Washington, and he can make him famous. We don't know the facts for sure because it was a long while ago. "George never told a lie. George never did a thing that was wrong. George was modest. Everything he did was perfect." The historian can say that because George Washington is a long while dead. That is easy. They can make a hero out of a dead man, but we ad men can take a live man, just an ordinary man like any dub here, we can take any man and if he gives us money enough we can put him up with George Washington while he is alive. We can give him the benefits of death without dying. Now what is the use of being dead when you can be living and famous? We ad. men say, "What is the use? If I am dead I am dead and it doesn't help me any." Fame doesn't make people any richer in the other world. There are no branch houses in heaven or hell. What is the use? I want my fame here. I want to cash in now." That is what sensible men are saying. You can't cash in unless you come to the advertising man and get help.

You think advertising is an expense and there is where most of you make a mistake. Whenever you come to consider your advertising appropriation you put it under the head of expense. It is not an expense. It is an asset. It is not under the head of a formality or something you have to do which adds to your cost. You know an oyster is a fish built like a nut, but an oyster is not a nut. An oyster is a fish. Now an ad man is a saver built like a spender. Ad men have all the motions of spending money. You make an appropriation and you give it to us. We

throw it out and spend it in the magazines. Then you think, "Gosh, don't those men spend money. They have got no respect for money." So, we go through the motions of spending, but there is no reason why we are spenders because we go through the motions. We are just like the oyster that is built like a nut. We are not what we look. We look like spenders but we are really savers. If advertising didn't cut costs, there wouldn't be any advertising. Advertising does cut costs. We had to have advertising because salesmen got so expensive. If I could hire salesmen at one cent a day, I wouldn't advertise at all. If there were some kind of salesman who didn't have to wear clothes and would still be decent and live on a peanut a day, I would hire a million salesmen. You see it would be cheaper to hire them, but salesmen are getting more expensive and more expensive, and so advertising is an expedient to cut costs in the selling of goods. The man who goes out to get customers without the help of advertising, is like a hunter hunting without a dog. It doesn't pay to hunt without a dog. You waste a lot of time. It is far better to get a cheaper gun and pay the rest of the money for a dog, because the dog stirs up the game. That is what advertising is to the salesman. We don't mind being dogs. We say that we can stir up the birds. We say that you can't stir up the birds because you don't know the bushes. You can't bark. We know how to bark. When you bark you make a funny noise.

The average gas company's ad is written by the book-keeper or the engineer. When we professional men look at it, it looks funny. The average gas company doesn't know the art of making ads. I don't mind giving it away, because you can't follow it out. There are three parts to an ad, the string, the bait, and the hook. You always put the hook at the top. How can you expect such an ad to pull? The main thing is the bait. You put your Company right in the headlines. We keep it out of the headlines. We talk to the public. The goods are in the middle and the company is at the bottom. That is professional advertising, built up so that it pulls the people who are not interested. A man who is not an ad man tries to please his boss. He writes his ad to please his wife, and he doesn't write an ad to please the public because he is not in touch with the public. With proper

advertising I have no doubt you could get back in money what you would spend for advertising, through the increase in the value of your stocks and bonds. Ask the Bankers' Trust Company, ask any great, big, responsible trust company or bond house in New York, and it will tell you they can get from two to five points more for your stocks and bonds if you are in touch with the public. If you do away with the ill-will of the public, up goes the price of your stocks and bonds. You have more people who want to buy stocks and bonds. The price goes up from one hundred two to one hundred four and one hundred seven. Then you have paid for all the advertising and you have increased your business for nothing. There is no reason why advertising should ever cost you one cent in the getting of business. You get back the cost in the increased number of shareholders and bondholders, the increased price and the increased demand there is for your securities. Advertising men know the power of simple slogans. We don't go at the public any more with a lot of abstract words. We put it in simple language. In shaping up the settler campaign for the State of Colorado I gave them this slogan, "Bring them in and show them how." We got it all over the State of Colorado, "Bring them in and show them how." We would meet in a great big meeting and I would make them say it over and over. Well, I got it in their minds. The only word that anybody can remember has got one syllable. We can remember the simple things. We remember Mother Goose. "Jack and Jill went up the hill." We never forget that as long as we live. Every single one of us remembers Mother Goose and we all remember it until our dying day. Why? Words of one syllable! No abstract words! We never remember abstract words. No abstract word means anything. The idea has got to be put in simple language.

I recently got up some slogans for the gas business. "What gas means to my home." That was the general idea. Then I put in subheads, "The quick breakfast and the cheerful wife. No ashes, no kindling, no wood, no woodshed, no mess in the kitchen. Light, heat and comfort for nine cents a day." Simple things. I got right back home, don't you see, and instead of formal, pompous ads, I wrote the simplest little talks. Most of

the talks were supposed to be by gas-users, such as this: "I can sleep twenty minutes longer in the morning, because we have gas in the house. I remember when I was a little boy I used to have to go out and light the fire. Often in the winter I used to have to go out to the coal shed or the wood shed, and I had to chop kindling, and it took an awful long time. I had to get up so early, and now wife goes out and turns the gas on and I can have twenty minutes more sleep and it makes me feel better all day long."

That is gas, don't you see? That is the way to get it across. Not by talking machinery, not by talking your end of the business—they don't care about that. They don't care for the cost of gas. They want to know what you do for them. They don't care how you do it. They don't care as to the sort of machinery you have or as to your equipment, but they do care as to what it means to their homes.

Another thing that advertising men do, they come in and put in the news point of view. That is what you are apt to forget. A gas corporation or a street car corporation or a railroad corporation too frequently gets away from the newspaper point of view, and it forgets what a newspaper is. I have been a newspaper man for quite a while, and served a pretty long apprenticeship, so that I can speak professionally as a newspaper man. A newspaper has got to be handled in a newspaper way. What is considered? The truth? The fact? Certainly not. A newspaper's first law is that the paper has got to come out. That is what the cub reporters and cub editors have to learn. The first thing is to remember that the paper has got to come out. If a paper misses a day, it is done. You can't have a daily paper that comes out every third day. If they waited for the facts, it would only come out once a month; once a week at the best. They slam it in. Somebody says, "I heard the St. John Railroad Company is going into the hands of a receiver." In it goes. I wish you could trace some of the articles back that get on the front page. If a reporter makes a mistake he contradicts it the next day, and so he gets another half column. He is just so much ahead. If he had waited for the truth he probably wouldn't have had anything. I remember one time, when I was one of the editors

of the New York World, we put up over the desk this motto, "Accuracy, Terseness, Accuracy." We put these mottos up seriously, but by and by, you know, as we began to look at them, they began to be very humorous. They got to be a joke. "Accuracy, terseness, accuracy." If we followed that we would get out half a page a day. The real newspaper slogan is—"slap her in and spin her out." If you don't know what the man's name was, put in somebody's name. It can't go in without a name. If you don't know who hit Jack Smith, then say somebody who was likely to hit him. We go on probabilities in newspaper work. Just put that fellow's name down. That is the way we make news.

What is news? News is any queer, freak thing that wasn't likely to happen. That is news. A cat catches a rat. That is nothing. A rat catches a cat. Great! John Smith is living respectably with his wife. Well, who cares? John Smith last night at midnight ran away with the janitor's daughter, and overcome with remorse they climbed to the top of the apartment building and clasped in each other's arms, they leaped to the sidewalk below. Grand! That is great, fine. Why, the reporters have hired people to do that. That is the news.

I picked up the Detroit Free Press this morning, and what was the news that hit me in the eye? "A college professor spanked his father." A picture of a college president turning his father over and gadding him. That is news. That is your Free Press. Such is every paper in the country. You have got to play up to that. When some priest in the day-time wears the robes of his calling and forgives sins under the sanction of Almighty God and dispenses forgiveness, when he represents the very holiness of the Almighty and sanctity and purity and infinity itself, and then by night removes those garments which represent holiness to the people and takes a butcher's saw and knife and creeps up to th bed of a sleeping girl, and cuts her body in nine pieces and carries her bleeding body to the river, and hurls them in, every paper in the country features that thing. Such a grand thing has not happened for twenty years. Such is the newspaper. That is the news. There has not been such a magnificent news for years and years as that.

Back of the newspaper is our love for reading that kind of thing. The newspapers aren't to blame. They know what people are like. They go by human nature. Now you have to learn human nature from the newspapers. We are living in a world that loves to read of these enormities. These bloody atrocities are the things that grip the heart because we are none of us so far removed from the savage, we are none of us so far from the woods but that we like the smell of blood. Why do so many papers use red ink? Because red ink is like blood. That is human nature. It is too bad that we don't live in the thirtieth century. I am very sorry I couldn't have come here this morning and spoken to you in a refined way, as though I were from Boston or Oxford, spoken to you of high and lofty things, of truth and nobility. I am sorry I cannot tell you to spread your wings and fly to the realms of idealism, but what is the use of talking to you men like that. The only thing I am interested in, the only thing you are interested in, is how to sell more gas, how to get a higher price and how to get so popular in your home town that the next time I have the honor of addressing you, there will be ten mayors here and fifteen councilmen and a whole lot of other officials, all wearing the badges of public office.

Now, you can make gas interesting. I don't say you ought to make it bloody. You have got to learn what the public is like. They have got to have their jokes. They have got to have their news. When the reporter comes for news you say to your book-keeper, "Give me the annual statement." The reporter comes to you for news and you hand him that annual statement. When he goes out of the door he throws the statement in an ash-barrel. What he wants is something like this: "What do you think, five of our girls got married last Wednesday. Why, we can't keep our girls. Our girls are so pretty I think every one of them has got a waiting list and five of them went off last Wednesday. We are short five girls right this morning. Would you mind taking an ad for more girls? Why, marriage takes from us all our pretty girls." That is news. They don't care about your annual statement. Nobody reads it if you put it in. You don't read it yourselves. There isn't a man present who can give me

three figures in the last statement of his own company. They have all gone out of your mind.

We have to make people appreciate gas by showing them the wonder of gas. I would advise not to sell gas at all. I would advise selling gas *service*. I was talking to the natural gas men the other day and I advised them to cut out the word "natural." People think it is a terrible thing to pay twenty or thirty cents for natural gas! Natural gas is worth twice what they get for it, but natural gas has not been appreciated. People think natural gas is a cheap thing, so they pay a low price for it.

You are like the brick men. The brick men never had a salesman. Here is the brick business six thousand years old. In six thousand years they never had an efficient salesman, or an advertising man who could advertise the brick so people would appreciate brick. As a result the concrete people came in and beat them out of their boots. There are hardly any brick people making any money. When a brick man gets a shoe-shine he has got to take a hod and carry twenty bricks. When he goes and gets a suit of clothes he has got to take three dray loads, and when his wife goes shopping he has got to have a train load of brick. When his wife goes out to buy a hat look at the pile of brick on her head. Now, that is because they don't know how to sell brick.

Here is the street car business. The people don't appreciate it. Just think what a street car means. People pay a nickel, and they ought to be ashamed to offer it. They pay a nickel and what do they get? They get an automobile that costs ten thousand dollars, and it doesn't run on a road, it runs on expensive steel rails without a jolt or a jar. It runs safely and you are protected while you are in it. It takes you ten miles for a nickel. Half a cent a mile, one-quarter as much as you pay on any steam railroad, and in Cleveland they are talking of cutting it from five to three cents. You want a ten thousand dollar automobile to take you ten miles for five cents, and what is going to happen when they get it down to three cents. When they get it down to three cents they will want to cut it down to two cents and then to one cent. If there were a city where they cut it

down to one cent a trolley ride, people would still go in and pay a cent and say "Grafters" when they put the penny in the box. That is how the public appreciates what you do. Think of the great cost of the street railways? The average trolley-car in this country represents an expenditure of at least \$20,000.00. You get the service of a \$20,000,000 company offered to you for a nickel. Here is a shoe-black with an outfit that costs thirty cents and he charges you ten cents for a shine. Here is a street car representing an investment of \$20,000,000 and it gives you a ten mile ride for a nickel.

Here is salt. Nobody ever appreciated salt, without which none of us could live. We have to eat salt or our bodies would become putrid. Salt is the very first thing that raises the savage out of savage life into civilized life. The only people who didn't use salt are the cannibals of the South Sea, and here in Detroit you are selling it for the price of mud. I wouldn't deliver mud for what they are delivering salt for. That is the salt business. They can make salt chemically pure. They know how to make it but they don't know how to sell it. The public pays ten cents for a great bag of salt and never says "thanks" to the salt company. In the days of the French Kings salt was a dollar a pound, and here to-day you get ten pounds for a cent. Nobody cares or thinks what grand people the salt men are who are giving salt at the price of mud. Nobody says it. You have got to move your commodity up so that the public appreciates it.

Insurance men know how to get appreciation. They are the best salesmen in the world. Every man of us is insured, some of us in a half dozen companies because we didn't like the last company. We never do, and we insure in another company and we keep on changing, you know. The new man comes to us and he is like a bookmaker with a bet. He says to you, "Now, Mr. Jones, I will bet you won't die for twenty years." You say, "I bet I will." See how he gets you? You put up the money and he makes the odds. You don't know anything about the odds. He has the figures in his pocket. You never looked up any figures. You never looked into them at all. You don't know your chances of life. He has got the facts on you and he knows it, and so you bet with him on his terms, don't you see? You

bet you will die and you go on praying that you will lose. That is the way the insurance men land us. They come at us from our point of view. They make a bet which is to our best interest to lose. So, of course, they win. That is salesmanship. Who ever thought of that built up a pretty big business.

Now, you can do that with gas. You can lift gas up to a higher class. Here you have a gas meeting under electric light. That is a mistake. You can lift gas up into the electric light class. You can change the class. Gas at present is in a lower class. You gas men very often act as though you were second class and electric light was first class, as if you were in the steerage and they were on the upper deck. Electric light hasn't got it on gas any more than gas has got it on electric light. Each one has its advantages. You shouldn't play second fiddle to electric light. No reason why you should. Gas is just as valuable in many ways as electric light. It is safer to handle in many ways, so there is no reason why you shouldn't be up in the same class with electric light and higher in some respects.

How was the steel business built up? Let me tell you the secret. Some steel men don't know what Bessemer steel is. It never was steel. What Bessemer steel is nobody knows. Bessemer steel is a freak metal. It is iron refined by a peculiar air blast process, refined by air and then a little mixture of manganese thrown into it, making it a freak iron. It is not steel and never was. But long ago when the salesmen came in and said to Carnegie, "What are we going to sell this Bessemer stuff for?" "Well," says Carnegie, being the best salesman that ever lived, having sold a plant for four dollars on a dollar, selling the Carnegie company with Carnegie left out. "Well, how much is steel?" "Sixty dollars a ton." How much is iron?" "Twenty dollars." "Sell it for steel." It has been sold for steel ever since. It is not steel and it never was. He put it in the steel class.

Here you are with your gas down in the water class, you see? Water has pipes, gas has pipes, and so you have allowed the public to put gas in the same class with water. Water flows out of wells through pipes, a cheap thing, anybody can pipe it in, and gas is put in the same class as water because it comes

through a pipe and not in the same class with electric light because electric light has wires. Now, the pipes are dearer than the wires. Why don't you get that across in the public mind? Wire is cheap, and pipe is dear. Gas comes expensively, electric light comes cheaply, but the public doesn't think of that. They put you in the same class with water, instead of up in the class with electric light.

I trust that you will vote in favor of this move towards advertising in National magazines and newspapers to put your whole profession on a higher level, and in addition to that, I hope you will increase your appropriations at home where you live to put gas into a higher class. As your President says, "Improve the environment of the industry" to the end that you will have less friction, to the end that these absurd and preposterous and penalizing laws that are passed in the Legislature shall not be proposed any longer; that you will cut down your legal expense and save from the lawyers what you spend with the advertising men. Law is the clenched fist, advertising is the open hand. Why won't you learn the difference? You hire your lawyers, and the more lawyers you hire the worse off you are. I never knew a man that had three doctors who was ever well. I never knew a corporation that had five lawyers that was ever out of trouble, but you are going ahead with your lawyers and your law-suits. A lawyer fights and quarrels and every fight he goes into is the reason for another fight. We advertising men say, "Cut out the fight." Don't give the public the clenched fist; give them the open hand. Tell them the simple facts about your business. Explain it to them and you can raise the price of gas.

Why, the other day on Broadway I went into Hick's fruit store and I saw one apple sold for forty cents. I asked the clerk how it happened. "Well," he says, "you know out there in Oregon there is a man who raises fancy apples, and he gets a nice white paper bag with a silky look to the paper, and he holds it under the apple which is cut off from the tree and it drops into the bag. No finger touches it. He seals up the bag with a little Oregon atmosphere and puts on it the exact date it was picked and that Mary J. Walsh picked it. He gets forty cents for a five cent apple. No hand touches it but yours. You pay

five cents for the apple and thirty-five cents for the story. You may be sure I bought an apple and took it home to my wife. She has been telling everybody in the house. That is how they sell Poland water. I was in the McAlpin Hotel the other day and I paid sixty cents for a small bottle of Poland water and gave the boy ten cents, making seventy cents. It wasn't holy water either. It wouldn't pardon sin. It was only water water. Why did I pay that? Because it has got the Poland trademark on, and I say "Poland" because I have read the Poland advertising and I know that there is no risk when I take Poland. I know that it is bottled at the Spring and I know it is handled in a clean way, I know it is safe. I am not buying water, but safety. I buy security. I drink it because I want a healthy stomach, and so I pay five cents for the water, and sixty-five cents for the satisfaction.

Sell satisfaction. Cut out gas. Talk service. Tell jokes. Do everything else, but don't talk gas. Cut out gas. Talk other things. There is no limit to what the public will pay when it gets satisfaction. In Pittsburg the other day a millionaire paid \$55,000 for the picture of a cow. Imagine a Pittsburg millionaire paying that much for a thing he couldn't milk. *Now go to it.*

THE PRESIDENT: It seems to me that this is the psychological moment to bring up the matter which was left on the table yesterday, a motion made by Mr. Douglas, I believe, and seconded by Mr. Elcock, that this Association wishes to express its approval of the national advertising campaign. I haven't the exact wording, but that is the principle. Would you like to take up this matter now, if so I should be glad to hear any remarks on the subject. It is open for discussion. There seems to be no desire to talk about it apparently, thanks to Mr. Casson. Those in favor of this motion will please say aye, contrary no. The motion is unanimously carried. Mr. Casson has succeeded in putting that across very satisfactorily.

There is nothing else to come up at this session, but there are to be two papers to-morrow, both of them of very great practical interest. One is entitled, "The Practical Effects of the Michigan Workmen's Compensation Law." It is an extremely valuable paper, very interesting and it is of very great importance. The other is Mr. Tippy's paper on "The Increasing Cost of Gas Making Materials." This paper will treat a very acute question, and I simply hope that there will be an excellent discussion of both of these papers.

MR. ELCOCK: I want to call the attention of this Association to the educational course, part three, which is in detail in the National Commercial Bulletin. We have heard a good deal about educating the public and our employees and this is a course that will be particularly useful. The other two courses which preceded this have been on the theory of selling, but this goes into knowing the goods. It will be applicable to any man in the gas industry, not only to salesmen but to everybody, and I really want you to look into it thoroughly through Mr. Chamberlain or the Secretary in New York. We want the thing to start positively by November 1st, and we have to get twelve hundred men. We want to get that many, we want to get them in soon.

THE PRESIDENT: I think that we have partially expressed our appreciation of Mr. Casson's lecture by our applause, but

I think it would also be proper if we had a rising vote of thanks to make it a little bit more formal. We gave him our informal appreciation at every step in his progress.

MR. HENRY W. DOUGLAS: I move that we have a rising vote of thanks to express our appreciation to Mr. Casson for his address.

Which motion was duly seconded and upon being put by the President was unanimously carried.

(Meeting adjourned until Friday).

Friday morning, September 19, 1913

The first thing in order this morning is a paper by Mr. B. O. Tippy on "The Increasing Cost of Gas Making Materials."

INCREASING COST OF GAS MAKING MATERIALS.

B. O. Tippy.

The general advance in the cost of living, about which we hear so much, coupled with the general advance in price of all material and labor entering into the operation as well as the construction of a gas plant, makes the consideration of this subject a timely one. Gas Coal being the principal gas making material, will be considered first.

GAS COAL.

Statistics have been received from several of the larger companies in the State—one of them extending back eighteen years. The price of coal during this period has advanced from \$2.50 per ton to \$3.20 per ton, being an increase of 28%. During the past fifteen years the Youghiogheny Gas Coal acreage has increased in value from about \$200 per acre to \$900 to \$1,000 per acre, each acre yielding about 6,000 tons of coal. Thus the price of coal in the hill, which was formerly figured at about five cents per ton, with improvements, is now about 20 cents per ton, including improvements.

The following is a quotation from a letter received from a prominent coal company:

"As I look back I find the mining rate in 1896 was 54 cents per ton, and in 1913 it is \$1.00 per ton. Wage for common day labor in 1896 was \$1.50 per day, and in 1913, \$2.42 per day. In 1896 the mines worked 10 hours per day, and in 1913 eight hours

per day, which in itself has a very important bearing on costs. I think that the above figures will show you that the cost of producing coal has almost doubled in the past 15 years. In 1898 our statistics show that $\frac{3}{4}$ " coal was sold at 90 cents per ton at the mines, and in 1913 at \$1.40 per ton at the mines. This advance in price does not cover the increased cost of the coal in the hill, and the increased cost in mining it. In addition to this you are well aware that everything that has gone into the mines in the way of supplies is very much higher than it was a few years ago. I mention these facts merely to show that it looks as if the present market is not an abnormal market, but rather that prices will be inclined to still further advance. In fact, I would say that they would be obliged to advance materially during the next ten years."

I am advised that next spring the agreement between the operators and miners in both the hard and soft coal fields will terminate for the first time simultaneously and that strong efforts will be made to advance the mining rate and at the same time to put the miners on a "Mine Run" basis instead of on a " $\frac{3}{4}$ " screened basis as at present. If this agreement materializes, it also will mean an advance in the price of coal of about 10 cents per ton.

GAS OIL.

Statistics from the same source as above extending back 18 years, show that the price of gas oil during this period has advanced from \$.0215 to \$.0320 per gallon, or an increase of 50%. This does not include the recent advance in price of oil of nearly 100%. The cause of this recent advance in price will be made clear, I think, from a study of the following tables which show the stocks of crude oil on hand. They are taken from the August number of the National Petroleum News:

EASTERN FIELDS.

Gross stock figures cover all stocks of all kinds of oil held by the Eastern lines. The stocks of oil of Pennsylvania and Lima-Indiana grades are also given separately, even though they are included in the gross stocks.

EASTERN FIELDS.

1911	Runs	Gross Stocks	Stocks of Pa. Grade		Price of Pa. Grade		Stocks of Lima, Ind.		Price of Lima, Ind.	
Jan.	2,362,732	15,523,308	4,486,088	\$1.30	4,317,175	\$0.82				
Feb.	2,244,812	15,969,581	3,535,902	1.30	4,383,561	.82				
Mar.	2,500,542	15,969,581	.....	1.30	.....	.82				
Apr.	2,334,829	15,759,086	.....	1.30	.....	.82				
May	2,561,835	15,548,097	.....	1.30	.....	.82				
June	2,420,768	16,346,540	4,541,906	1.30	3,724,478	.82				
July	2,143,366	15,928,715	4,198,692	1.30	3,724,478	.82				
Aug.	2,270,443	15,780,145	4,071,571	1.30	3,840,998	.92				
Sept.	2,133,340	15,200,054	3,758,182	1.30	3,207,020	.84				
Oct.	2,188,334	14,239,369	3,523,285	1.30	3,201,967	.84				
Nov.	2,023,108	14,152,613	3,471,669	1.30	3,302,854	.84				
Dec.	2,176,369	12,399,553	3,493,874	1.35	2,896,457	.84				
1912.										
Jan.	1,809,624	18,455,840	3,591,920	1.50	2,967,238	.92				
Feb.	1,936,973	18,083,228	3,791,735	1.50	2,990,298	.95				
Mar.	2,399,796	12,491,170	3,965,689	1.50	3,010,540	.98				
Apr.	2,475,429	11,658,625	4,052,141	1.55	3,022,377	1.00				
May	2,638,288	11,620,775	4,233,146	1.55	2,494,149	1.02				
June	2,517,194	11,320,615	4,168,146	1.60	2,515,578	1.02				
July	2,575,483	10,908,167	4,114,242	1.60	2,151,647	1.04				
Aug.	2,582,757	11,315,925	3,861,026	1.60	2,307,331	1.04				
Sept.	2,253,815	11,248,198	3,720,398	1.60	2,444,979	1.04				
Oct.	2,380,025	10,616,324	3,386,484	1.65	2,135,500	1.07				
Nov.	2,125,200	10,340,681	3,408,784	1.85	2,134,642	1.18				
Dec.	2,280,823	10,422,467	3,499,751	2.60	2,297,560	1.25				
1913.										
Jan.	2,244,978	10,191,283	3,555,852	2.50	2,338,451	1.37				
Feb.	2,021,132	10,145,879	3,673,992	2.50	2,238,048	1.37				
Mar.	2,059,994	10,002,976	3,717,662	2.50	2,132,306	1.37				
Apr.	2,379,743	10,054,281	3,735,756	2.50	2,229,721	1.39				
May	2,300,678	9,688,390	3,181,304	2.50	2,045,212	1.39				
June	2,235,906	9,791,996	3,682,118	2.60	1,965,272	1.39				

ILLINOIS.

MID-CONTINENT.

1911	Runs	Stocks	Price	Runs	Stocks at the Wells	Price at the Wells
Jan.	2,169,878.48	26,243,014.79	\$0.60	4,136,352	50,272,506	\$0.44
Feb.	1,994,231.42	25,635,245.01	.60	3,927,572	50,070,938	.44
Mar.	2,589,684.97	23,997,495.65	.60	4,631,308	50,539,839	.44
Apr.	2,173,939.43	24,005,009.96	.63	5,010,351	52,659,839	.46
May	2,299,881.16	24,129,387.96	.63	4,868,093	51,246,470	.46
June	2,208,358.29	28,195,749.12	.65	4,655,117	52,804,724	.48
July	2,292,926.66	22,714,182.54	.65	4,617,378	52,272,420	.48
Aug.	2,340,877.21	22,265,927.92	.65	4,613,399	51,087,764	.48
Sept.	2,179,591.49	21,904,718.65	.67	4,433,096	49,892,178	.50
Oct.	2,195,407.56	21,359,482.42	.67	4,521,700	50,726,829	.50
Nov.	1,996,321.16	20,211,934.37	.67	4,261,070	50,272,560	.50
Dec.	2,088,368.54	19,131,677.63	.69	4,087,224	50,260,203	.51
1912.						
Jan.	1,870,413.30	18,393,303.04	.75	3,857,448	49,876,465	.57
Feb.	1,872,169.87	17,706,834.72	.78	3,719,798	49,607,961	.60
Mar.	1,970,421.14	17,278,537.27	.81	3,826,496	49,371,119	.60
Apr.	1,935,015.12	17,001,287.72	.83	3,671,572	49,022,689	.64
May	2,104,689.43	16,636,328.76	.85	4,171,483	49,022,614	.68
June	2,099,719.88	16,235,352.83	.85	4,162,648	48,752,055	.68
July	2,241,787.12	15,689,993.67	.87	4,468,873	48,865,091	.70
Aug.	2,013,419.46	14,682,822.79	.87	4,703,036	48,751,731	.70
Sept.	1,885,226.99	13,949,064.15	.87	4,482,978	48,301,432	.70
Oct.	1,915,928.31	13,039,507.24	.90	4,896,647	48,093,614	.70
Nov.	1,700,704.92	12,307,724.81	.96	4,790,734	47,794,788	.76
Dec.	1,633,586.83	11,598,519.08	1.08	5,039,393	47,695,447	.88
1913.						
Jan.	1,614,667.45	11,134,331.94	1.14	5,046,196	47,678,070	.88
Feb.	1,866,718.50	10,366,965.03	1.25	4,802,513	47,889,151	.88
Mar.	1,478,900.43	9,966,083.21	1.25	5,398,883	48,391,425	.88
Apr.	1,479,791.92	9,486,416.02	1.30	5,374,263	49,412,506	.88
May	1,573,150.55	8,990,143.47	1.30	5,417,057	49,928,680	.88
June	1,493,690.77	8,111,628.56	1.30	5,168,817	50,371,176	.88

While these figures show that stocks in the mid continent fields alone have about held their own, the total crude oil on hand above ground—all fields considered—has steadily decreased in the last two years by about one-third of their total original amount and that the price has steadily advanced approximately 100%. Results of my interviews with oil men of high standing—both Standard Oil and so called independents—prove to me that this is a very deep subject and that my knowledge of the exact oil situation today is incomplete at best—even the oil men themselves having widely different opinions and theories as to what may happen. Indications however, seem to point to the conclusion that unless a new and large oil field is discovered the price of oil must continue to advance. By this I mean that while the advance may not be violent or immediate and may be in a series of ups and downs the ultimate net result of these movements or fluctuations will be higher prices.

The oil business has very materially changed in the last few years. At one time gasoline was a drug on the market and was allowed to run away in the sewers, and it was at this time that the gasoline stove was brought out to produce a market for this waste product. The advent of the automobile has tremendously stimulated the business until gasoline is now being used to such an extent for automobiles, gasoline launches and other kindred purposes, that in order to supply the demand it has been necessary to include in gasoline other fractions distilling at higher temperatures, therefore, the gasoline of today is quite a different product than formerly. Under these changed conditions, there is now an over production of kerosene and the oil companies have developed the Blue Flame Oil Stove, and also oil engines for farm use in an endeavor to realize a fair price for this product. Much of the kerosene produced, however, is run in with the gas oil and there is being developed an engine, which will use gas oil or fuel oil in an endeavor to secure a better price for these low priced oils.

Not long ago the Standard Oil Company let it be known that they had devised a process for either increasing the quantity of gasoline to be extracted from crude petroleum, or had a method by which they would manufacture a so called "Motor

Spirit," and that on this account would manufacture less gas and fuel oils—even refraining from making contracts—with the result that gas and fuel oils became more expensive. The latest information, which I have is that the so called "Motor Spirit" is not a success for the purpose for which it was intended, and it is a fact that the Standard Oil Company have again changed their policy and are making contracts for fuel oil and gas oil.

I am told that the manufacture of "Motor Spirit" is a dangerous process and has been undertaken only at the Standard Oil Company Plant at Whiting, Ind. I am informed that gas oil and fuel oil are sold at a loss as compared with the cost of crude oil, from which they are obtained, and that there was only two months during the recent high prices for these products, in which they were not sold at a loss. It is said that the Standard Oil Company is perfecting a process whereby fuel and gas oils will be worked up in a manner similar to that in which coal tar is now handled in Germany—that is into delicate dyes and other high priced products, and it is said they hope to make this the most profitable part of the oil business. Fuel oil and gas oil cannot be sold at much lower prices than are now being received, and if crude oil continues to advance in price, all fuel and gas oils must advance with it.

COKE.

Genuine Gas Coke, of course, is an important item in making water gas, but prices and conditions of preparing and marketing vary considerably in a comparison of one city with another and, therefore, there is not much that would be of interest in submitting coke statistics in this connection. The price, however, of foundry coke delivered in Detroit in 1903 was \$5.50 and in 1913, \$5.60 with fluctuation within that time of prices as shown in the following table:

YEAR	PRICE
1903	\$5.50
1904	4.55
1905	4.50
1906	5.25
1907	5.65
1908	5.00

YEAR	PRICE
1909	5.75
1910	5.50
1911	5.00
1912	4.50
1913	5.60

ANTHRACITE COAL.

While not used in this State in the manufacture of Water Gas is largely used in some sections of the country. Practically all the Anthracite Coal is owned by Transportation Companies. In the Eighties, these companies, because they needed money sold at auction in New York City large quantities of Anthracite coal. In many cases the net returns did not exceed \$1.25 to \$1.50 per gross ton at the mines. Since this period there has been a gradual advance in price, due to increased cost of production and other causes, until we now find a sliding scale of \$3.25 to \$4.00 per gross ton at the mines. A few years back the labor condition was not a serious question. The majority of the men employed in the mines were English, Welsh or Irish.. Today thirty-seven or more languages and dialects are spoken by the men around the mines. Different races select different duties which they prefer to perform. For instance, the Italian is rarely found below the ground. Each nationality has its own holiday, and inasmuch as no portion of an anthracite operation can continue working unless all other departments are under way, the observance of the holiday of one class forces idleness upon all others, thus curtailing production.

In July of this year a tax of $2\frac{1}{2}\%$ ad valorem levied by the State of Pennsylvania became effective on anthracite coal at the mine breaker. This tax will run from 3 cents to 11 cents per ton, and the dealers have added 10 cents per ton on each ton of coal sold.

DISCUSSION

THE PRESIDENT: Gentleman, Mr. Tippy has shown very clearly that, along with the rest of the people of the United States, gas men are laboring under the difficulties of the increasing cost of living and unlike some merchants who add the tax on the product that they have to sell we are in a position where we can't do that, as franchises generally have a good many years to run, and to raise the price of the commodity which we have to sell is an unheard of thing in the gas industry. This is a very acute question which Mr. Tippy has so ably presented, and I hope that we may hear a good discussion of the points he has brought out, and doubtless there are some matters which he has brought out can be brought out more fully in discussion. The paper is open for discussion. Mr. Dewey, haven't you something that you would like to add to this?

MR. V. F. DEWEY: Mr. President, the paper is of considerable interest and it is a fact that we are face to face with a condition that is going to be pretty hard to meet, providing the artificial restrictions under which most of us are laboring are not modified somewhat. There is a way to meet this and I believe that the public commissions of the various states are awake to the situation. The up-state commission of New York in their recent recommendations which, I believe, have not as yet been printed, has recommended that the average B. T. U. be 570. That makes it possible for us to go to a different grade of material in the production of gas. They have cut out, I believe, the candle power standard altogether. The Wisconsin Commission, of course, was the pioneer in that movement, fixing the average B. T. U. at 600 with a minimum of 550. It is along these lines that we can hope for some relief, but the companies that are operating under a high minimum B. T. U., high candle power, are absolutely up against it. Unless we can make some arrangement with the municipalities in which we are operating it may result in the necessity of advancing rates. Before that is done I think it is up to the people in charge of the various properties to attempt some solution of the problem along the lines indicated.

MR. HENRY W. DOUGLAS: I read and heard the paper with a great deal of interest. It certainly is a point which we are all interested in, and there does not seem to be any means at hand for increasing to any great extent the efficiency of our plant. I don't believe that the last three or four years has seen the plant efficiency increased to any great degree. I believe, if Michigan can ever get a commission, there may be some relief to some of us in that respect, and I hope that any franchises which are granted until we do get a commission will have the reservation of allowing the company to come under the control of the commission, if we can ever get it.

PRESIDENT BLAUVELT: There are two or three things which enter into this matter which ought to be touched upon, and one is the price of the enriching oil, benzol.

It used to be the case six or seven years ago that benzol for gas enrichment was comparatively cheap so, that you could conform to candle power standards at a comparatively low cost. The elimination of candle power standards did not seem important, not anything like as important as it is to-day; but with the increasing demand of benzol to take the place of gasoline in internal combustion engines the price of benzol is soaring as is the price of gasoline. Now as an offset to the increasing cost of coal, of gas oil, of benzol, of coke and of anthracite coal, the materials for making gas, and the increasing cost of our labor and the increasing cost of all that goes into plant construction, we have our residuals. Coke has gone up a little but only about in proportion as coal has gone up, so that does not furnish any real relief. Ammonia and ammonia products were hit by the tariff being removed and dropped to a very low price immediately after the going into effect of the tariff under which we are now working. The immediate effect was a reduction in price, but with the increasing energy devoted to the selling campaign, and the increasing knowledge amongst agricultural communities of the value of nitrogenous fertilizer, sulphate of ammonia, which fixes the price of all ammonia products, has now gone up to a price slightly above what it was when the tariff was removed. Tar is at just about the same price and doesn't give promise of

any marked advance. Now you see we have almost nothing to offset the increasing cost of the things we have to buy.

It seems to me that Mr. Tippy's paper together with the reasonable deductions therefrom, bring forth the fact of the necessity of educating the public up to the point of view that we are suffering along with the ordinary householder in the increased cost of materials that are necessary for existence; that we are doing our best to overcome our handicaps, and up to date we have been able to constantly improve our service and in general reduce the cost to the consumer. In the pamphlet which has been issued by the Department of Commerce and Labor on the retail cost of commodities I am very glad indeed that gas is included as amongst the household necessities, and it is one thing which has shown a constant and very considerable decrease in cost, when all other commodities have been going up. I believe that there isn't anything that can be done which will put our business in better relations with the general public than to get that matter very firmly before the public so that it will appreciate the condition. When you talk to any individual and explain this matter to him he is absolutely reasonable. The question is how we can get that personal touch with all the individuals who make up our public, and it seems to me that it is a very important problem that we have to solve and that, in the very near future. It will not do to let things drift, or we will drift upon the rocks. We must make headway in the right direction to avoid a wreck.

MR. HENRY W. DOUGLAS: Mr. President, apropos of the remark you just made in regard to the publicity of the increasing cost of living and the decreasing cost of gas, I might say that we have been using those figures which I obtained from the market reports from the papers in the past year covering a period of ten years ago in our advertising matter, and I fail to see where it is creating very much comment. I don't know whether you can get at the public in a thing of that kind through advertising space. We used the matter quite a little.

THE PRESIDENT: Mr. Tippy, have you anything to add in closing the discussion

MR. TIPPY: No.

THE PRESIDENT: The next paper is the paper by Mr. Schroeder on the "Practical Effects of the Workmen's Compensation Law."

THE PRACTICAL EFFECTS OF THE MICHIGAN WORKMEN'S COMPENSATION LAW ESPECIALLY AS IT AFFECTS GAS COMPANIES.

Albert G. Schroeder.

At the time this paper is being written the so-called Michigan Workmen's Compensation Law has been in effect for not quite one year, but from the workings of the law even in this limited period, it is already apparent that this legislation is of tremendous importance and that it is possibly the most important single piece of legislation ever placed on the statute books of Michigan. In order to obtain a clear understanding of just why it is so important and to point out its practical effects upon employers in general and upon our Michigan gas companies in particular, it is necessary to review to some extent the conditions that prevailed in this state as concerns industrial accidents, prior to September 1st, 1912, the date on which the Workmen's Compensation Law went into effect.

INDUSTRIAL ACCIDENTS UNDER THE COMMON LAW.

Previous to September 1st, 1912, the matter of compensation or indemnity for physical injuries suffered through accidents incident to the employment of labor was governed entirely by common law principles. As is probably generally understood, the American Common Law is based on the English Common Law and consists of an accumulation of legal principles, customs and court decisions, developed and compiled in the course of centuries and coinciding with and following closely the development of the Anglo-Saxon race. As distinguished from the Common Law we have Statutory Law, or the written law as ex-

pressed by the legislating body. In the absence of any statutory or written law, the common law alone applies. Now under the common law no employer could be held liable to an employe for injuries resulting from an accident in the employer's establishment, if he could show, (1) that the employe was negligent, or (2) that the injury was caused by the negligence of a fellow-workman, or (3) that the employe had assumed risks inherent in, incidental to, or arising out of his employment or arising out of the failure of the employer to provide and maintain safe premises and suitable apparatus. With the growth of modern industrial conditions and especially with the rapid increase in use of machinery, there were many accidents in which an employe injured through really no fault of his own, would be unable to recover any damages whatever. On the other hand, under the common law, where there were no statutory provisions to define what would be reasonable indemnity to pay for certain accidents there was every opportunity in the world for unscrupulous lawyers to trump up cases on the contingent fee system whereby they and the employe would divide whatever it would be possible to obtain from the employer or insurance company in the way of settlement or through an actual damage suit. Another unfortunate result of conditions under the common law was the spirit of antagonism which was often bred between the employer and employe in the event of an accident. The employer in order to guard himself against excessive damage suits usually carried liability insurance and therefore the settlement of the case was practically entirely out of his hands. By the provisions of his policy he was forced to cut the man officially off his pay roll immediately and must be careful in all his dealings with the injured lest he admit a liability for the accident. He might desire to assist the employe to a reasonable extent in a meritorious case, but would frequently not know just how such assistance could be given and in order to remain safe, usually allowed the insurance company to handle the matter entirely. On the other hand, an employe would often feel that he had an opportunity to obtain possibly big damages on account of his injury, or he would resent the employer's action in cutting off his wages, and as a result there would be an antagonistic feeling just at the time

when the employe and his family were in need of sympathy and looking after and the employer in need of relief from worry as to what might be the final outcome of the case, especially if he should be unfortunate enough to have carried either no insurance or an inadequate amount. Then finally when settlement of some kind had been made only a comparatively small portion of the money would go to the injured employe. Statistics show that throughout this country as a whole, not to exceed 36% of the amount of premiums paid for liability insurance were paid out for losses by the indemnity companies. All of the balance, excepting a not unreasonable percentage of profit, was absorbed in soliciting business and the expense of litigation. In other words, two-thirds of the money paid by the employers and considered by them as their cost of industrial accidents did not reach the injured person at all.

In recent years and especially during the past five years, a great deal of consideration has been given the matter of industrial accidents. There have been two great co-related movements connected herewith. First there has been a general campaign in America and abroad to show the necessity of the prevention of accidents, the slogan of this movement being "Safety First." The second movement has been for the passage of laws which would put an end to the generally unsatisfactory conditions that prevailed under the common law methods of obtaining compensation for industrial accidents and to fix by law the indemnities that would apply in all industrial accidents. It has become recognized that except in the case of wilful negligence or misconduct, an employe should not be expected to bear the burden of his injury, but that this should be assumed by the industry which made a profit from his employment. Among other states, Michigan took up this matter quite promptly and at the 1911 session of the state legislature a commission was authorized and appointed by Governor Osborne to make an investigation and to recommend a suitable law. On this commission both employer and workman were represented and the law as drafted seemed to meet with the general approval of both sides. To quote from the Bulletin issued by this commission, the theory on which the Workmen's Compensation Law is based is as follows:

"That when a worker is injured in an industry the loss to him was occasioned by the industry, and that the products of that industry should be charged with that loss and should be paid by them." The principles of the law are these, (1) that injured workmen may receive justice, (2) that employers may have fixed liabilities and escape from the embarrassment and expense of damage suits, (3) that the courts may be relieved of the time of trying damage suits, (4) that the public treasury be relieved of the expense of these damage suits, (5) that the public be relieved of caring for the victims of industrial accidents, (6) that more harmonious relations be promoted between employers and employes. In drafting the law it was the aim to provide, (1) reasonable compensation at minimum cost for all accidents, except the result of wilful fault, (2) certainty of amount, (3) certainty of payment, (4) payment without litigation, (5) prevention of accidents.

PROVISIONS OF THE WORKMEN'S COMPENSATION LAW.

One distinguishing feature of the Workmen's Compensation Law is that it provides benefits for every injury regardless of fault or negligence, except wilful negligence. However, the employe really bears a part of the cost of such compensation, because, while under the common law damages if any recovery was had were assessed on the basis of 100% of his earnings, the Compensation Law pays the injured employe beginning with the third week of his disability only 50% of his last earnings. The employe also contributes in the sense that he obtains no compensation for the first two weeks of his disability unless the total incapacity should extend to eight weeks. In connection hereto the following extract from the report submitted to the legislature is of interest: "We have made no provision for contribution by employes to funds necessary to pay compensation accruing under this Act. While it has been said with much force that such contribution, however small, by employes would tend to give them a feeling of added responsibility and as this law covers accidents arising from their carelessness as well as from industrial dangers, they ought morally to share the burden, yet after full consideration of this subject we have reached the conclusion that

it is not wise to recommend that they be required to do so. In reaching this conclusion we have had in mind that employers may to some extent add the amount of such payment to the cost of production which of course could not be done by the employes except by demanding an increase of wages to that amount. Finally, we think that the physical injury and suffering of the employe is quite sufficient to constitute his portion of this industrial burden."

The important features of the law as it relates to compensation are briefly as follows:

Surgeon and Hospital Service: During the first three weeks after injury the employer shall furnish or cause to be furnished reasonable medical and hospital services and medicines when needed.

In Case of Death: Payment of one-half of average weekly wages, but not more than \$10 nor less than \$4, for a period of 300 weeks. Maximum payment possible, \$3,000.

Injury Involving Total Disability: One-half of weekly wages, not more than \$10 nor less than \$4 per week, during the extent of total disability, for a maximum period of 500 weeks. The total amount of all compensation possible, \$4,000.

Partial Disability: Partial disability following total disability and necessitating employment at reduced wages calls for payment during partial disability of one-half the difference between wages previous to and subsequent to the injury. And when partial disability is permanent, such as involves the loss of a member, payments are to be made according to a schedule specified in the law, which ranges up to the loss of an arm calling for payment of 50% of average weekly wages during 200 weeks, or a maximum payment of \$2,000. Loss of both hands, both arms, both feet, both legs, both eyes, or any two thereof constitutes total and permanent disability.

WHY IT IS DESIRABLE FOR EMPLOYERS TO OPERATE UNDER THE LAW.

The Michigan Workmen's Compensation Law is not a compulsory law, that is no employer is compelled to operate under it unless he so elects. A similar law passed in the state of New York several years ago, was a compulsory law and imposed upon the employer certain payments which he was compelled to make under the law; the New York Supreme Court held that this law was unconstitutional because it deprived the employer of property without due process of law. The Michigan law remedies this defect by making it optional with the employer whether or not he will elect to come under the law. But, and this is a point which is not understood by all employers and apparently not by a few of our Michigan gas companies, the law creates such a condition that the employer who does not elect to operate under it is taking a very grave risk. The very first thing that the new law does, namely, is to abolish the three common law defenses of the employer, above explained, namely, assumption of risk, contributory negligence, and fellow servant negligence, leaving the only defense which the employer has in case of an injury to one of his employes that of proving wilful negligence on the part of such employe. It will readily be appreciated how much chance an employer, and especially let us say a gas company, would have in proving wilful negligence on the part of the employe to the average jury. In other words by removing the three defenses, the new law changes a condition which under the common law was unfortunate enough to one that is simply intolerable. It is therefore distinctly to the employer's advantage to elect to operate under the compensation law in which case he escapes every liability whatsoever except as provided by this law, for the death of or personal injury to any employe. The only kinds of labor not covered by this law are farm hands and domestic servants and persons employed but casually.

ADMINISTRATION OF THE LAW.

The entire administration of the Workmen's Compensation Law is in the hands of the Industrial Accident Board, consisting of three members appointed by the Governor, the term of

office for members of this Board being six years, a new member being appointed every second year. Not more than two members are to belong to the same political party. The Board has the power to appoint a Secretary and sufficient assistants and clerical help. The first annual appropriation made covering the expenses of the Board was \$25,000. The appropriation for the second year is to be \$40,000. The Industrial Accident Board under the law has indeed some very great powers. Whether the Board in any of the cases that have been passed on by it so far has exceeded its authority can not be stated at this time because no Supreme Court decisions have been handed down in such cases as have been appealed. Under the law, the Industrial Accident Board is the Court of Last Resort as to the findings of fact, but the Supreme Court has the power to review questions of law involved in the final decisions or determinations of the Board.

As one of the essential principles of the law is that the employe shall not only be certain of the amount of compensation but shall also be certain of payment without litigation, the law very clearly provides that those who come under its provisions must give satisfactory evidence of their ability to make the payments in a convenient and practicable way. The Industrial Accident Board must authorize the employer to carry his own risk, or to insure in any employers' liability insurance company authorized to take risks in the state of Michigan, or to insure in any employers' mutual association organized under the laws of this state, or with the State Commissioner of Insurance. After the Board has approved of the employer's election to operate under the law, every accident involving any disability must be reported to the Board under penalty of \$50 for failure to do so, and no settlement can be made with the employe without the approval of the Board. The Board in its rulings has shown that it is determined that the spirit as well as the letter of the law be carried out to the fullest extent. As soon as a case comes before the Board either by notice received from the employer or from the employe, it is followed up by the Board until the proper disposition has been made and it is the purpose of the Board to have the files in every case show that justice has been done to both sides.

PROCEDURE IN CASE OF DISPUTE.

All Agreements in regard to compensation must be submitted to the Board for approval and if approved by it are final and binding on the parties thereto. If, however, an Agreement in regard to compensation is approved by the Board and subsequent events prove that the compensation was inadequate according to the law, the case may be reopened. In case of a dispute between the employer or the insurance company carrying his risk, and the injured employe, either party may notify the Industrial Accident Board who will then call for the formation of a committee of arbitration consisting of three members. One of these will be a member of the Industrial Accident Board and he will act as chairman, the other two members being named by the respective parties. Unless a claim for review is filed by either party within seven days, the decision of this committee of arbitration must stand as the decision of the Industrial Accident Board. If a claim for review is filed the Industrial Accident Board as a whole will promptly review the decision of the committee of arbitration and the records of the case, and the decision of the full Board will be final and binding upon the two parties. Then of course the law provides for an appeal to the Supreme Court, which Court, however, will concern itself only with points of law and not of fact.

There are certain hazards over which the employer has very little control and which may cause very serious trouble. For instance, there is the risk that after an employe has received an injury and has been properly taken care of by surgical attention that he will himself be careless; for example, he may take off a bandage and infection set in. If this is the result of an injury obtained during employment the employer is liable under the law, at least he would be held to be so by the Board, regardless of the subsequent carelessness on the part of the employe. The physical condition of his employes then becomes a hazard to the employer. If a man has a constitutional disease and suffers an injury and the injury is aggravated by reason of his disease, the employer must nevertheless pay him full compensation. It is conceivable

that under certain conditions an employe might be injured during employment while in a state of intoxication and the employer have to pay compensation. In fact the entire matter can almost be summed up thus—

That any disability which results from an accident suffered during the course of employment will have to be taken care of according to the provisions of the law, almost regardless of the employe's physical condition at the time of injury or his actions afterward.

This is practically what it all amounts to. Just how far the law covers such cases, the future must develop. The physical condition of his employes and their habits, however, become matters of considerable concern to the employer who is operating under this law. The result is bound to be that employers will reject the physically and morally unfit, whose burden will have to be assumed by society.

SOME DECISIONS OF THE INDUSTRIAL ACCIDENT BOARD.

The following decisions of the Industrial Accident Board sitting as a Court of Review, show better than anything else how the law is working out in practice. The quotations are taken from the Detroit Legal News, the syllabus only being given of each decision.

Studebaker Corporation vs. Mrs. David Doig.

David Doig, husband of the applicant, was employed as a lathe hand. Claimant maintained that Doig died as a result of a scratch on his back caused by a steel shaving getting inside his shirt. No record of any accident.

On arbitration no evidence was introduced to show that husband of claimant had met with an injury. No award.

Michigan Steel Casting Company vs. Silic.

Silic was employed as a grinder and claimed that while grinding a tool his hand slipped against the emery wheel, inflicting an apparent slight injury to the thumb. The wound was cleansed and dressed and Silic continued his work. As the wound did not seem to heal properly, in a few days he was sent to the doctor, who tried to persuade him to have two stitches taken in the wound, but this the claimant refused to have done. Later he consulted his own physician and when he returned to work about two weeks later the thumb had been amputated at the first joint, the second doctor claiming that the thumb was broken and that amputation was necessary.

On arbitration claimant was allowed compensation for a period of thirty weeks.

Lavack vs. Diamond Manufacturing Company.

Lavack was employed as a box-maker at a weekly wage of \$17.50. No one in the plant knew of the injury but a written notice was received from the injured man in which he claimed that his eyesight had been impaired.

On arbitration the claimant was allowed the sum of \$8.85 per week during his disability for a period not to exceed 500 weeks. The decision of the arbitration committee was appealed from by the respondent and on rehearing before the full Board, the decision of the arbitration committee was affirmed with the exception that the amount of weekly payments was reduced to \$8.65 per week.

Limron vs. Pere Marquette R. R. Company.

Applicant suffered an accident which resulted in the loss of one foot and serious injuries to the other foot and one arm. Either one of these injuries would have rendered the applicant totally disabled. It is the contention of respondent that the applicant is only entitled to half wages for 125 weeks with such further compensation as shall seem necessary at the end of that time.

Held: In view of the fact that applicant suffered the permanent loss of his right foot, which of itself would entitle him to compensation for 125 weeks, as well as the other injuries which would give him claim for like compensation, he is entitled to receive half wages during the continuance of total disability resulting from the injuries exclusive of the loss of his foot, which compensation shall be added to the amount of compensation allowed for the loss of the foot.

Detroit Steel Products Company vs. Helen Jendrus.

Respondent's decedent suffered an injury while in the employ of the applicant, which necessitated an operation. Decedent refused to allow an operation until the next day, although he was told it was necessary. While the operation was being performed decedent vomited and some of the vomit was drawn into his lungs causing pneumonia, which resulted in his death.

Held: The refusal to be operated on when first requested to is not so unreasonable as to defeat the claim for compensation, as decedent finally consented when convinced that the operation was absolutely necessary.

Spooner vs. Detroit Saturday Night.

Decedent was employed by the Winn & Hammond Printing Company as engineer. The plant of the Detroit Saturday Night, having been injured by fire, temporary arrangements were made with the Winn & Hammond Company for the use of their plant to get out the paper. Decedent was killed while running an elevator during the night on which respondent was using the plant. Respondent contends that decedent was not in its employ at the time of the accident, and that running the elevator was out of the course of his regular employment. It was shown that respondents entered into a contract part of which stipulated that they were to furnish a competent engineer to attend to the engine while they had the use of the plant. They did in fact hire a man but decedent insisted that he do the work himself.

Held: 1. That as Spooner's work for Winn & Hammond ceased at 5 o'clock in the afternoon and his pay for the night work was made by respondent this was sufficient to make him an employee of respondent.

2. That inasmuch as he met his death while running the elevator at the request of respondent's foreman, this was sufficient to bring his act within the course of his employment.

Rayner vs. Sligh Furniture Company.

Applicant's decedent was employed in the factory of appellant. It was customary for the appellant to announce the noon hour by blowing a whistle. The employes were required to proceed to the end of the room in which they worked and punch a time clock before leaving for dinner. On the day of his injury decedent ran from his bench a distance of about 150 feet, to punch the clock and collided with a fellow workman, receiving injuries which resulted in his death. There was a rule forbidding the men running to punch the clock, but defendant's foreman testified that it was not strictly enforced.

Held: 1. That the mere fact that such a rule was made is not controlling when its general violation is acquiesced in by the employer.

2. The infraction of this rule by decedent was not such intentional and wilful misconduct as to bar recovery in view of the fact that it was the general custom of decedent's fellow employees and was tacitly permitted by respondent's foreman.

Hopkins vs. Michigan Sugar Company.

Applicant's decedent was employed as chief engineer for respondent. His duties consisted in exercising supervision over the six plants of the company located in different parts of the State. The exercise of his employment required him to do considerable traveling by steam road and trolley. On reaching home after one of his trips, there being no car at the depot, he started to walk home. After walking a number of blocks, a car came along and as he started to board it he slipped on some ice and injured his head. Upon reaching home he explained to his wife, and later to other people, that he had met with an accident and stated in detail how and where

it occurred. Respondent contends that evidence of the statements made by deceased was inadmissible as hearsay and that there is no legal proof tending to show that the injury was received by him in the course of his employment.

Held: 1. That the statements relative to the accident, made by decedent, to his wife and others, immediately after the accident, are admissible in evidence.

2. That inasmuch as decedent was injured while traveling, and the further fact that his traveling expenses were paid by respondent, such facts were sufficient to show that the injury arose in the course and out of decedent's employment.

Clem vs. Chalmers Motor Car Co.

Claimant's decedent was employed as carpenter by defendant. While working on the roof of one of defendant's buildings during cold weather decedent was asked by his foreman to come down from the roof and have some hot coffee, which was customarily served to the men employed in this work, to mitigate the effects of the cold. The ordinary means used for descending from the roof was an extension ladder, but decedent chose to descend by means of a rope and in some manner lost his hold of the rope and was killed. Payment of the claim was disputed on the ground that the deceased was not injured while in the course of his regular employment, and that the injury was the result of his intentional and wilful misconduct.

Held: 1. That the manner chosen by deceased to descend from the roof did not place his act out of the course of his regular employment.

2. The fact that it was not uncommon for fellow employees of deceased to descend in the same manner, and that deceased used much care in letting himself down from the roof did not constitute "intentional wilful misconduct" within the meaning of the statute.

Note—This case has been appealed to and argued before the State Supreme Court but as yet no decision has been handed down. As the details of the Board's decision in this case are particularly interesting they are given in full below.

On December 12, 1912, Charles S. Clem was in the employ of Chalmers Motor Company in Detroit and was receiving an average weekly wage of \$20.65. He was a carpenter by trade and was working on the roof of the new storage building which was being erected by the company. This building was approximately 160 feet long, 150 feet wide and 19 or 20 feet high, the roof in course of construction being what is commonly called a flat roof. The day was cold and the men employed on this roof, 25 or 30 in number, were obliged to wear gloves or mittens in their work. During the few days of very cold weather at this time, the foreman provided hot coffee for the men, and at about 9 o'clock in the forenoon of each day would call them down from the roof for a hot coffee lunch. The ordinary means used by the men for descending from the roof of the building was an extension ladder, such as painters use, 20 feet in length, resting against the south side of the building and tied to it by ropes. This was the only ladder provided. The heavier material used by the men in their work was lifted to the roof by block and tackle with rope falls, and in addition to this there were about a dozen ropes from 20 to 30 feet in length which were used to pull up lighter material over the cornice of the building when needed by the men working on the roof. These ropes were located around in different places so that when material was needed at any particular place there would be a rope near at hand with which to haul it up. The ropes were lying on the roof and at places where the men happened to leave them.

At about 9 o'clock in the forenoon of December 12, 1912, the foreman called the men working on the roof to come down for hot coffee, and it appears that they proceeded to go down by way of the ladder, one following another. While others were going down in this way, Mr. Clem said to a fellow workman named Sekos, "Hold this rope and I will slip down." From this point Sekos tells the story as follows: "I was in a hurry to get down. I wanted to get down, but I just held it (the rope). Another man was behind me on the roof, but did not have hold of the rope. * * * I held the rope all right; it didn't let loose at all; it didn't break, and if he had hung on the rope all right he would have got down safely. I guess he lost the rope; I guess his hands were cold; he had mitts on his hands and so did I. * * * It was pretty cold; we were so cold, we were going down to get some coffee."

The only other eye witness was Albert E. Glaser, the man who stood behind Sekos when Clem started down the rope. Glaser testified in substance that Clem asked Sekos to hold the rope for him; that Sekos held one end of the rope; that Clem took the other end of it, went over to the edge of the roof and got down, feet first on his knees, and went down backwards, with his legs down first, holding onto the rope with his hands. That he was careful about it, and that would be the most careful way to do it; Clem had gloves on his hands; it was so cold that we could not work without gloves; we were all cold at that time and fingers a little stiff with the cold; a man with fingers stiffened with the cold would not be able to hold onto a rope as he otherwise could.

Angus E. McDonald was a sub-foreman, having charge of part of the men working on the roof. McDonald had been a sailor and used a rope instead of the ladder on going up to and down from the roof of this building probably four or five times; and on one occasion when he so used a rope, the general foreman cautioned him and the men then present not to use ropes for going up and down, but to use the ladder. There was no evidence that Clem was present at this time, or that the foreman's order not to use the rope ever reached him. It is conceded that no question as to the effect of violation of shop rules or orders is involved in this case. It is also conceded the "Coming down off the roof for coffee lunch" at the foreman's call was "in the course of Clem's employment." The issue is narrowed down to "the manner of coming down" from the roof, and the means used by Clem for that purpose. It is contended on behalf of the company that compensation should be denied because (1) the injury is not one arising out of and in the course of the employment of deceased, and (2) that it was the result of his intentional and wilful misconduct.

The first objection, we think, can not be sustained. It is a matter of common knowledge that carpenters' employees in the erection of a building must ascend and descend and change their positions on the building as the work requires and that they are often required to choose the means and manner of so doing. This is also shown by the proofs, attention being called to the testimony of McDonald, the sub-foreman, that it is not uncommon for men to go down a rope if there is one there, and that he would sooner go down a rope than not. We think the means and manner chosen by deceased to descend from the roof, did not place his act of descending outside of the course of his employment. Did his choice of the means and manner of descent constitute "intentional and wilful misconduct" within the meaning of the Compensation Law? Mere negligence on the part of deceased will not defeat the claim of his widow for compensation. A mistaken estimate of the risk in descending by means of a rope, or the mere choosing of means and manner of descending which were less safe than the ladder, would at most be only negligence on the part of deceased. There is no evidence of wilfulness except what might be inferred from the naked fact of choosing the rope method of descending. The evidence shows that deceased exercised much care in letting himself down over the edge of the roof with the rope. There is an entire absence of any showing of wilfulness by any act or word of deceased except as above, and we think it may be fairly said that deceased acted in the belief that he could safely descend by the rope. He fell because of losing his hold on the rope. Whether this resulted from his fingers being stiffened with cold, or from his gloves, or for some other cause does not appear. It was not impossible that by reason of frosted fingers or some other cause he might have lost his hold on the ladder, had he chosen that way of descending. We are of the opinion that the act complained of did not constitute "Intentional and wilful misconduct" within the meaning of the statute, and the decision of the arbitration committee in favor of the widow is affirmed.

EFFECTS ON GAS COMPANIES.

Having now to some extent considered the law as it relates to all employers in the state of Michigan, we shall try to consider what its effects are more particularly on the gas companies in the state. The writer sent a letter to every gas company in the state in the endeavor to obtain information from which intelligent conclusions could be drawn as to the experiences of the various companies, and many of the statements and suggestions that follow are based upon the information received in these reports.

With the exception of a very few of the smaller companies all gas companies immediately elected to come under the provisions of the law as of September 1st, 1912, the date it went into effect. Those companies who did not place themselves under the law are such as have been fortunate in the matter of accidents in the past. In the larger plants where accidents are of more frequent occurrence there was only one course possible, namely, to operate under the new law. Probably most of the companies at the time the law went into effect had been carrying employers' liability insurance. Such insurance policies were either automatically or by action of the insurance companies canceled as of September 1st and the new rates covering workmen's compensation put into effect. It was possible to insure against employer's liability only for any employer who did not elect to come under the law, but the cost of such insurance was as great as that for workmen's compensation under which the employe would get the benefit without legal action.

The new insurance rates covering workmen's compensation were not announced until only a few weeks before the law went into effect. They were found to be from three to six times as high as the previous rates for employers' liability only, depending upon the character of the work and whether the latter covered first medical aid, full medical aid, or no medical aid, etc. The manual rate quoted for general operation of gas works, shop, etc. was \$2.48 per \$100 of pay roll, or practically 2½%. Under the circumstances practically all of the larger companies of the state decided to carry their own insurance. Several companies report

that they at first carried their own risk and then later on took out insurance. The majority of the smaller companies in the state do carry insurance, mostly with stock companies. One company reports that it insured with the Commissioner of Insurance. Several companies carry insurance only on part of their risk.

COMPANIES CARRYING INSURANCE.

Most of us naturally have felt that the new insurance rates are very high. Unquestionably the new rates were more or less experimental, although the experience under the old employers' liability policies was without doubt taken into careful account and the probable cost of the same accidents under the new law taken as an approximate basis for the new rates. It must be considered that even though most of their legal expense has been abolished by the new law, the insurance companies are now required to pay certain definite sums in every case, while under the common law they were often able to make settlement for considerable less than the merits of a case warranted. Heretofore in making rates for employers' liability or workmen's compensation insurance it has been the custom of the insurance companies to name a flat rate covering an entire classification or industry without regard to the merits of any particular individual in that industry and this rate was applied throughout the entire industry regardless of the moral hazard of the individual taking out the insurance. However, for some little time there has been a movement on foot to place the rating of these risks on a "merit system" exactly as is done in making rates for fire insurance. That is, such employers who are making special effort to avoid accidents and whose premises are in better physical condition than the average throughout the industry are to receive the benefit of their progressiveness and good management by being quoted lower rates. This matter has not as yet been entirely worked out in Michigan but the proposition is well under way. It would therefore, be well for such gas companies as have made special efforts to safe-guard their plants to take this matter up with their insurance agents and ask for special rating on their plant according to the merit system. It is quite likely that many of the agents will be unfamiliar with this as yet, but they can

soon find out about it by taking the matter up with their home offices.

As already alluded to, the law permits the formation of mutual insurance companies for carrying workmen's compensation risks. Naturally the proposition suggests itself whether the smaller gas companies in this state who are not in position to carry their own insurance individually, would profit by the formation of a mutual insurance company. There are at present two such companies, one organized by Detroit manufacturers, the other by the furniture manufacturers of Grand Rapids. The big disadvantage would be that the members of a mutual company organized to cover the smaller gas companies of the state are so widely scattered that it would not only be expensive to administer the affairs of the organization, but it would be difficult to keep in close touch with the individual companies and equally difficult to handle individual cases to the satisfaction of the member companies. Without doubt it is safest and most satisfactory for the smaller gas companies to continue to carry insurance in well established stock companies. and to safeguard their premises in every way to prevent accidents and to work for a reduction in the rates on the merit plan. While without a doubt the increased cost of insurance is a considerable burden to some of the companies, by carrying such insurance their expenses in this respect are fixed, and as it is expected that each industry shall bear the burden of compensating for accidents to the workmen therein, the cost of such insurance surely is a legitimate item in the cost of gas and should receive due consideration in the fixing of rates.

COMPANIES CARRYING THEIR OWN RISKS.

In the case of the larger gas companies where the premiums for workmen's compensation insurance at the new rates ran well up into four figures for annual premium and where the resources are greater and the opportunity for systematic accident prevention is better, the matter assumes a somewhat different aspect. Evidently most of these companies have felt that they wished to make an experimental venture for at least the first year, or until such time as the insurance companies have adjusted their rates to a basis where insurance would be attractive. The common

practice in these companies has been to build up a reserve by setting aside monthly a certain amount instead of what was formerly charged to and paid out for employers' liability insurance. In most of the companies the rates taken for this were the new rates offered by the insurance companies for workmen's compensation insurance. One company reports that it merely doubled the previous rate. With very few exceptions the companies that carry their own insurance apparently have profited thus far, but of course there is the argument of the insurance agent that while during the first few years a very fair reserve may be built up, a succession of accidents or a catastrophe may very soon convert this reserve to a deficit. One attractive feature of carrying one's own risk is that then we can treat directly with our own employes instead of through the agency of a third party. Even under the compensation law there are certain cases where a degree of liberality is advisable and desirable, and not always obtainable from an insurance company. On the other hand it is a fact that thus far many cases have been settled by the insurance companies where there would have been good grounds for appeal.

It is quite a question whether it is good business policy to continue to carry our own risk if the insurance rates can be brought down to a reasonable figure. This of course is a matter which every company must decide for itself. There is this difference too between carrying employers' liability insurance and workmen's compensation insurance that under the present law our liability is fixed and we are not subject to unjust and unreasonable awards for damages by prejudiced juries. And, if we exercise due care and in addition thereto are fortunate for at least a few years until we can accumulate a fairly large reserve, then the situation becomes considerably different and we could probably continue profitably to carry our own insurance. In any event whether we carry our own insurance or let some one else carry it, the work of prevention of accidents is indeed of tremendous importance and aside from the humanitarian feature can be directly translated into a saving of dollars and cents.

THE IMPORTANCE OF FURNISHING A FIRST CLASS SURGEON.

The law requires the employer during the first three weeks following the injury to furnish reasonable medical and hospital service and medicines free of charge. If we carry insurance in a stock company, the medical expense is taken care of by the insurance company to whose interests it is to see that good surgical aid is provided. If we carry our own risk this matter of providing doctor's services becomes indeed of very vital importance. With many companies carrying their own insurance, the medical expense has amounted to more than the moneys paid out for actual compensation. It is hard to overestimate the value of a first class surgeon or the importance of getting the employe into his hands as quickly as possible after the injury and keeping him under the doctor's charge until he is again in shape for work, even though it may in some cases be necessary to assume more than the three week's doctor's bills. The question has arisen whether the employer has the right to insist that the employe be treated by the surgeon he provides and while no definite and fixed ruling has been handed down in this case, it would seem that the Board would have to hold that if the employer furnishes a first class surgeon and is ready to do everything that the law calls for that there should be no objection on the part of the employe to submit to such treatment. On the other hand there have been many cases where employes have engaged their own doctors principally because the matter was left to them, and in such cases too the physicians have frequently attempted to send in bills for exorbitant charges. In case of claim for compensation the law entitles the employer to have his own physician examine the employe, the employe having the right to have his own physician present at the examination. However, all of this is avoided if the employer himself provides the surgeon under a definite standing arrangement or contract. It is exceedingly important that all employes and especially those in charge, be impressed by instructions and otherwise, that every injured employe no matter how slight the injury, must at once present himself to the surgeon for examination. The doctor should immediately report every case of treatment of an employe and it is well to provide him with forms for this purpose which he can fill out and

mail in. In this manner also a check is had on the reports made from the department in which the injury occurred. Of course a complete record and report should always be made and retained on file and it is well to make such reports even in cases where there appears to be no disability, because very often such cases develop later on into the kind that make serious trouble. Then if the disability exceeds fifteen days this report is made the basis for the report to the Industrial Accident Board. To any one interested in obtaining samples of forms used for reporting details of accidents and forms used for Surgeon's reports they will be sent upon request to the writer.

METHODS OF PROCEDURE UNDER THE LAW.

For the sake of completeness and for the benefit of those who have had little experience under the law, a description is given of the methods of procedure adopted by the Industrial Accident Board. When an employer desires to notify the Board that he elects to come under the law, a blank form provided by the Board is sent him to be filled out. On this he must state what method of payment he has decided on—whether he will carry his own risk, or insure with a stock company, or insure in a mutual company, or insure with the Commissioner of Insurance. In case the employer wishes to carry his own risk he must present an affidavit showing his resources. If the declarations of the employer are satisfactory to the Board, he is notified that his election is approved and he is sent some printed notices for posting around his establishment giving notice to all employes that he is operating under the Workmen's Compensation Law. These notices must remain posted permanently. If any employe desires not to be bound by the terms of the law, but wishes in case of an accident to proceed against his employer under the common law, he must serve notice to his employer at the time of his entering his employment that he elects not to be subject to the provisions of this law, or if he is already in the employment of the employer at the time the employer becomes subject to the provisions of the law, he tacitly assents if he remains in the service of the employer for 30 days after the employer has filed with the Board his notice to be subject to the terms of the Act.

There was a report some time ago that the opinion had been given that this feature of the law might cause it to be declared unconstitutional because it interfered with constitutional rights of the employe. For this reason there are some manufacturers who require each employe to state definitely at the time of entering employment whether or not he elects to be under the law, in other words they do not act on the assumption that the employe has waived his rights tacitly.

In event of an accident which involves the loss of at least a full working day, the employer is required to send to the Industrial Accident Board at Lansing, a brief report of such accident on a Weekly Report Form known as Form No. 5 A. On this form are reported the date of injury, name of injured, his occupation, the

nature of his injury, the number of days lost and the medical expense, if the latter is known at the time the report is made. In the larger concerns it is good practice and in line with the desires of the Board to send one of these reports each week even in case no accidents have occurred during the week in question, in such cases that fact being noted on the report. In this manner the weekly report becomes a routine matter and is not overlooked. It is also the intent to have carried forward on the Weekly Report Form, the names of all employes who are incapacitated in any way, totally or partially, supplementing previous reports so that the last one always gives the complete information up to that time, and so that as long as an employe is incapacitated or receives compensation, his name will appear on the weekly report.

In case the accident involves the loss of a member, or death, or disability continuing for more than 14 days, a detailed report of the accident is required to be made upon a form known as No. 6, First Report of Accident. This report calls for all of the details of the case and serves as a notice to the Board that compensation is due. The time for making this report in cases where the accident involves the loss of a member or death is within ten days after the accident. Where the accident results in disability only, the report is to be made on the fifteenth day after the accident. The report must be full and complete, as it is necessary for the Board to have the full details of all cases in which compensation is required under the law. Theoretically under the law the employe is required to serve a written notice of injury on the employer, this to be done on a form provided by the Board and known as Form No. 5, Notice to Employer of Claim for Injury. In actual practice this form is usually filled out on behalf of the employe by the employer at the time that Agreement in Regard to Compensation is drawn on Form No. 10. On this latter form are recited the full particulars of the accident and the terms of the agreement as agreed upon between the employer or insurance company on his behalf, and the injured employe. If the terms of this agreement are approved by the Board, a notice is sent to the employer reading as follows: "The agreement in regard to compensation in the above case has been passed upon by the Industrial Accident Board and approved. It is required by the Industrial Accident Board that Receipts on Account of Compensation (Form No. 11) be taken when payments are made, the same to be submitted to the Board monthly. A Settlement Receipt (Form No. 12) is to be signed when final payment is made and to be accompanied by Final Report of Accident (Form No. 7-A)." The Receipts on Account and Final Settlement Receipts are forms provided by the Board which show in detail the periods covered and the amounts of compensation. A receipt on account of compensation usually is to be taken each week as it is the intent of the law that payments should be made weekly. After weekly payment has been continued for not less than six months, the Board may approve of the payment of a lump sum in order to redeem further liability, the deferred payments being commuted on the present worth thereof at 5%. In no case, however, may a lump sum payment be made without specific approval by the Board. The object of this is to prevent the employe from squandering his compensation. The Final Report of Accident (Form 7-A) shows the total amount of compensation paid and the total medical cost, completing the history of the case. No acknowledgments are made by the Industrial Accident Board of settlement receipts or final reports of accidents, their approval letter covering

agreement in regard to compensation being sufficient to close the case as far as the Board is concerned. If, however, receipts covering payments are not filed from time to time in accordance with the requirements of the Board as stated in the approval letter, the employer is notified.

GENERAL COMMENTS ON THE LAW.

(a) During the 1913 session of the legislature there was some talk of introducing an amendment to the law permitting employes to choose after the occurrence of an accident, whether they would take compensation as provided by the Act or would proceed against the employer under the common law. Needless to say no such a proposition would be tenable.

(b) At present the employe must lose two full weeks' pay to get one-half week's pay. There will quite likely be an attempt made to amend the law to reduce the period of no compensation from two weeks to one week. This would be highly undesirable, because, while it would benefit some employes in meritorious cases, in others it would vastly increase the temptation to soldier. It would greatly increase the cost of compensation and would increase the insurance rates considerably.

(c) The difficulty of obtaining immediate reports on minor accidents is an objection to the present law. However, it seems to be entirely up to the employer to see that every accident is promptly discovered and reported.

(d) The insurance companies have paid many claims which, if permitted to go to arbitration or appeal, would probably have been decided in favor of the employer, but in most cases the insurance companies preferred to settle both for the sake of economy and to keep in good standing with the Board. This is not always a good thing to do because in many cases the Board would doubtless welcome appeals in order to clearly define its power. No doubt in some cases the Board has gone a little too far on the supposition and possibly even in the hope that the employer or insurance company would appeal. A few more years experience should develop some very interesting and important decisions.

(e) The State Insurance Department has been basing its rates upon 60% of the stock insurance companies' manual rates, but at this reduced cost provides no medical aid. The stock companies claim that there has been a great decrease in the number of subscribers for state mutual insurance and that as the law is becoming more generally understood the employers are preferring the stock company insurance with its fixed premiums.

(f) The Secretary of the Industrial Accident Board states that they are handicapped at the present time by inadequate appropriation of funds. They are unable to do a great deal of necessary statistical work. There is no disinclination on the part of the Board to furnish acknowledgements of Settlement Receipts and Final Reports following approval of agreements for compensation, but this is considered as an unnecessary additional expense, the letter of approval being considered sufficient.

(g) The present law does not cover occupational diseases, such as poisoning from lead, arsenic, or paris green. However there was a case recently decided where an employe died of lead poisoning and his family was allowed full compensation.

(h) One objection urged on the behalf of the employe is that in certain cases the employe might be disabled for considerably more than three weeks and inasmuch as the law only compels the employer to pay for the first three weeks of surgical, medical and hospital services, the cost of such necessary medical and hospital services for the period in excess of three weeks might amount to more than the compensation received by the employe. While this doubtless could be true, in many cases it is also true that it is to the advantage of the employer or insurance company to assume medical expenses after the three weeks as the period of compensation is correspondently reduced. Then too, it would seem that in meritorious cases the employer would voluntarily see that the spirit of the law was carried out and that the employe was properly cared for. Many cases could be cited where employers and insurance companies have voluntarily assumed such additional expenses.

(i) The following statistics as of September 1st, 1913 will probably be of interest:

Employers operating under the Act	9,796
Employes covered by the Act	454,636
Total Number Accidents reported ..	18,095
Total number of Agreements executed	11,531
Males injured	17,775
Females injured	320
Fatalities	408
Amputations	1,934
Major injuries (8 weeks or more)	6,246
Minor injuries (less than 8 weeks) ..	9,507

Employes Classified:

Manufacturing	245,314
Transportation	42,768
Public Utilities	5,585
Realty—Management	6,268
Mining	41,383
Merchandising	40,874
Publishing	8,125
Construction	64,339

Employers Classified:

Carrying own risk	587
Mutual Insurance	192
State Commissioner	327
Liability Insurance	8,690

CONCLUSION.

While no doubt there are some things in the Michigan Workmen's Compensation Law that are not ideal, looking at it from a broad point of view is it not rather remarkable that so few real defects have been found in it and that there is not more dissatisfaction with it, when it is considered that this law must please both capital and labor? In all legislation of this nature there are bound to be cases where individuals will suffer and where apparently full justice is not always done, but taking the law as a whole, the writer feels safe in saying that the experiences in its first year of operation have been such that there are very few employers in the state, gas companies included, who would now care to go back and operate under the former conditions.

DISCUSSION

THE PRESIDENT: Gentlemen, I think that the Michigan Gas Association is to be congratulated on such a thorough report of a year's workings of the Workmen's Compensation Law. I think Mr. Schroeder has plainly proved that this Workmen's Compensation Law which, to some of us, was looked upon as a dangerous thing has worked out very satisfactorily. The paper is now open for discussion. I believe that Mr. Lloyd has prepared a little written discussion which we would be glad to hear first.

MR. E. F. LLOYD: The Association is to be congratulated in having presented for its information so concise a statement of the Michigan Workmen's Compensation Law, and so clear an explanation of the financial risk involved by any undertaking which ignores or overlooks its provisions.

So fully has Mr. Schroeder covered his subject that it seems to me little can be added to that feature of it.

It would have been outside the province of his paper, I take it, to have entered into a discussion of the theory and principles underlying the Law or the changes which it is destined to bring about in our industrial fabric; but I believe that an understanding of these principles is a necessary compliment to Mr. Schroeder's definitions and as a participant in the early efforts to secure its enactment, it may not be out of place in this discussion for me to present some of them.

This Law is more than a new Statute. Actually it is a revolution. At one stroke it sweeps away all the legal growth of centuries of individualism which had been completely outgrown by the modern development of machinery and its ensuing communalism in our industrial life.

In the first place, it should not be overlooked that this law throughout is an Employer's measure. It was conceived by employers, it was drafted by employers, it was urged before the Legislature by employers, and it was passed and enacted into a law at the instance of employers.

It is true that the best elements representing the workmen, as we understand such, were consulted and that their views were carefully considered and in measure are reflected in the law. It

is also true that the law does not reflect the unanimous sentiment of employers, at least it did not prior to its enactment.

None the less, as it finally went into the Statute Book, it was and is an employer's measure and it has been maintained without amendment primarily at the instance of employers, but it is most gratifying to record, with the co-operation of the same best elements representing the workmen who, in the first instance, assisted in its drafting.

Bearing these facts in mind, it was doubly important that those responsible should exercise the most extreme care that this legislation be laid upon the broadest principles of the Jeffersonian Doctrine of "Equal and Exact Justice to All Men." And I believe that this law, more notably and definitely than any other piece of legislation in Michigan, at least in this generation, reflects this principle.

It is an endeavor to be exactly just, without embodying any humanitarian ideas or motives, except as exact justice may involve the humanities.

If I understand the underlying principle of law, it has no pity, no friendliness, no helpfulness, no reward, no punishment, no revenge, no rich, no poor, no care of what may become of any individual before it. It concerns itself solely that exact, unfeeling, merciless justice shall be meted out to him.

And it is probably the underlying cause for the failure of so many—such an overwhelming proportion of our laws that they attempt to do something for the benefit of; to provide, I might say, an unearned increment for some particular class or kind of people—are what is popularly called "class legislation." All such laws may be endured for a time, but sooner or later must fail.

Whatever may be the actual ultimate working out of the Michigan Workmen's Compensation Law, it was and its title bears evidence of its intent to be, an attempt to reach the foundation rock of simple justice and I think a careful study of the cases and decisions cited by Mr. Schroeder will show that the awards of the Industrial Accident Board have been singularly in consonance with this principle.

What the immediate effect may be, what measures the employer may take to protect himself, what society may be called upon to do, the law properly ignores. Mr. Schroeder so ably sums up and forecasts this on page 109 that I think his paragraphs should be emphasized by repetition:

"That any disability which results from an accident suffered during the course of employment will have to be taken care of according to the provisions of the law, almost regardless of the employe's physical condition at the time of injury or his actions afterward. Just how far the law covers such cases, the future must develop. The physical condition of his employes and their habits, however, become matters of considerable concern to the employer who is operating under this law. The result is bound to be that employers will reject the physically and morally unfit, whose burden will have to be assumed by society."

That is precisely so. Many employers are even now requiring applicants to submit to a physical examination, after the manner of the Army and Navy authorities. And as these laws multiply in the different States, as insurance companies become more keenly discriminating in fixing rates based upon *both the moral and physical hazards* of each individual risk; as the cost of carelessness or indifference on the part of employers becomes a seriously apparent element in competitive business; the employer will reject the unfit just as to-day he has come to reject the habitual drunkard.

And when society—the community—is confronted with these rejects it will have to do as it does with its financial unfortunates—send them to institutions provided for their care or recouplement—moral poorhouses, asylums or detention homes. I think it is not an Utopian hope to believe a generation may rise, as a result of this law, and others like it to follow in other States, that will teach in the schools how to care for and guard the body against both accident and disease; and that just as temperance is being spread by the increasingly rigid discrimination of employers against the drinker; so physical health, mental alertness, education and moral habits will be strengthened, alike by the pressure of teachings and the fear of the public brand—"unfit."

In theory then, this law regards a workman and his industrially valuable members—as his hands, feet, eyes and brain matter, merely as the more or less valuable teeth in a cog wheel of the industrial machine. In other words, it might be said to start out with a perfect physical man—100% man—exclusive of any endowment of education. He is like a lathe, or a planer, or what not tool that you may buy first hand and put into your shop in good order. It represents full value. If you buy a second hand tool with a broken or repaired member, you pay less for it, you expect less accurate work from it, you know it must be watched more carefully or operated by a more skilled man to prevent its turning out defective work. So if you hire a man with one arm, you pay him less than if he has two, so also if he is uneducated, if he is not sensible of dangers surrounding him in his work, or oblivious of the possible consequences of risks he may take, you must provide the watchfulness to guard him against injury as you would provide the watchfulness to guard against defective work produced by your second hand tool.

Now, if any tool in your shop becomes disabled, you pay the price of repairing it and you feed it while it is out of repair in the sense that you are under necessity of earning from some other source, the interest charges on the investment which it represents. If the injury to that tool is irreparable so that it cannot be rehabilitated for your purpose but may be of use to some one else for a less valuable purpose, you sell it at a heavy discount. If it has been irretrievably wrecked, you consign it to the junk.

So too, if one of your human machines becomes disabled, you shall pay a compensation, so to speak the interest charges on his value, in the form of 50% of his full earning capacity while he is recovering; but in case of total disability, you pay a greater charge as you would take a greater discount from the original value of the tool; or you pay a still further compensation as you would take a complete loss, if through death such workman goes to the grave as does the tool to the junk pile.

It is and will always be an open question as to what may be the relative values of the different members of a man's body and as to what may be their actual earning values to that man. It

is not possible and probably never will be possible to accurately fix either the relative or the actual values to be put into compensation for different classes of injury as the loss of a hand, a foot, or eye.

These values as fixed in this Compensation Law are an attempt provided by more or less compromise between various ideas to arrive at values, actual and relative from a purely industrial standpoint. Doubtless they will be subject to more or less modifications and readjustments as time goes on, experience accumulates and values change. As to the *amount* of compensation to be paid to any individual, I think the basis of using the amount of the weekly wage to determine the relative and actual value of the particular individual in the industrial fabric is perhaps as accurate as any other that might be adopted.

The second and far reaching element in this law is an outgrowth of its underlying principles and may be summed up in a single word—*Prevention*—and Prevention as used in this sense is indeed a far reaching element. It is not for a day, nor a year—hardly for a generation—in its broadest sense it must anticipate the cradle.

According to the statistics as of September first last which Mr. Schroeder has presented, you will note that the total number of accidents divided into the total number of employees covered by the Act, shows that out of every 25 persons employed, one was sufficiently injured in twelve months to warrant a report to the Board. You will note further that of the 18,000 odd accidents reported, upwards of 6,200 or nearly one-third or expressed differently—one person out of every 75 employed under the Act in its first year, were so severely injured as to be laid by for eight weeks or longer. Further you will note that out of these 18,000 persons injured, nearly 2,000 or substantially one in every 235 persons employed, was so seriously injured as to suffer an amputation and almost more terrible is the record of 408 fatalities or substantially one fatality to every 1,100 persons employed under the Act. In short, in this present year, a little less than 1-10th of 1% of all the people working in the State of Michigan, on the basis of last year's reports, *will be killed*. One-tenth of one per cent. dead. Stop to think of that figure. Your Bank

will charge you one-tenth of one per cent. of the value of a check for the simple service of sending it over to another Bank to collect. What should we think of the fact that in the performance of the ordinary services of building our houses, paving our streets, carrying us from place to place, there has and perhaps is to be sacrificed the life of one out of every 1,100 of those who serve us for one year.

The immense, practical, splendid service of this law, is the compulsion which it puts upon the more intelligent class of the community—the employer—as the agent, the representative of the ultimate consumer, to prevent this terrible loss. That is the greatest work which this law shall perform.

It may be of some interest to you to know of what even a feeble attempt at prevention exerted in one, and that perhaps not the most important, direction can accomplish. It is an intimation of what this Michigan Gas Association might also do.

The City of Detroit has an Employer's Association which represents, as I recall, about 225 employers, employing approximately 75,000 men, having an annual pay roll of approximately \$60,000,000.00.

Something less than a year before this law went into effect, the Employer's Association of Detroit established a Factory Inspection Department. It employs at its own expense one man whose duty it is to visit in rotation all the factories of the members and to point out features or practices which in his opinion possess elements of danger and the possibility of accident. He acts under the supervision of a Safeguards Committee of the Association which supervises and directs his work. I will not trouble you with minor details beyond saying that to this date, this Factory Inspector has made approximately 2450 individual inspections and has pointed out to members well upwards of 6,000 items which appeared to him to be dangerous. Understand this is exclusive of and in addition to all inspections which may be made by the State Factory Inspectors; or things which may be seen by insurance companies' inspectors; or by any private corps of inspectors that any plant may maintain for itself. What the result of this may be in figures, it is impossible to state, but as of February 15th last, this Association ascertained that on that

date, the number of persons employed in Wayne County under this Act was practically 53% of all the persons employed under the Act in the State. Of this number about 50% were employed by members of the Employer's Association, in short about 27% of the entire number of employees under the Act in the State were, as of that date, employed by members of the Employer's Association of Detroit.

These figures are of no importance except as showing the relation of the Employer's Association to the industrial life of the County and State. What is of importance, however, may be indicated by the comparison of the percentage of fatalities. Of these, a little less than half occurred in Wayne County. In other words, the number of fatalities in Wayne County relative to the number of employees in Wayne County was nearly the average of the State; but whereas the Employer's Association's members employed half of the working people in Wayne County, the fatalities among their employees were only 13% of the fatalities of the County. Or whereas they employed 27% of the working population of the State, the fatalities among their employees was only substantially 6½% of the fatalities in the State. We have no statistics to show the percentage of the lesser injuries among the Association's employees as compared to other employees, and no means of knowing precisely the value of the measures taken; but at least a work of amelioration has been carried on by a private organization and the figures may be significant.

Some of the relative figures of accident and the cost of accidents to individual corporations before the law went into effect and since it did so with its accompanying rigidity of preventive measures, present simply astonishing figures of what may be done in the way of prevention.

Lastly, I want to emphasize this, the greatest and most essential measures of prevention lie in education. I heard it said sometime ago that the Superintendent of a very large plant had expressed the opinion that if he put into his plant every possible mechanical safeguard which knowledge, experience, observation and forethought could devise, he would not be able to succeed through that means alone in preventing more than 25% of the

accidents which happened. So astonishing did this statement appear that it is said he was asked whether he had not made a mistake in his percentage estimate and if he would not go over the matter more carefully and give a revised authoritative statement, to which he is said to have answered that he thought on further consideration he probably was mistaken in his estimate and that the percentage of accidents which could be prevented by mechanical safe guards alone was probably only about 10% instead of the 25% which he had first suggested.

Some accidents there are and always will be that no human foresight or forethought can foresee or prevent. These are calamities that we must endure, each with a personal feeling of the hurt to the body politic.

For the rest, the slow world long process of education is the keynote.

You can give the most imperative orders you choose to your employees that they shall not go alone into a room where gas is frequently present, or alone into a street regulator vault; you can put signs up in such doorways or openings—"Don't go in here alone"; you can paint the entrances of such places in brilliant scarlet; but until you, or Society, or both, have taken the *intellect* of your workmen, the *rough mental cog* of the tool you have hired, and cut and polished and educated it to an *appreciation* that it *shall not disregard* that warning, that it shall think and act in terms of "Safety First"; you will have to haul a certain percentage of them dead out of those rooms and vaults and the Industrial Board will rule that you must pay their widows compensation for the loss of their earning power and the law that says you shall do so is based upon justice and is right.

C. D. DYER, JR.: Considerable uncertainty as to the advisability of a gas company carrying its own insurance, when operating under the Michigan Workman's Compensation Law, seems

to exist in the minds of some of the members of the Association, as is evidenced by the following remarks extracted from Mr. Schroeder's discussion of this class of risk, viz., "evidently most of these companies have felt that they wished to make an experimental venture for at least the first year, or until such time as the insurance companies have adjusted their rates to a basis where insurance would be attractive." We believe that the conclusions derived from the experiences of the Solvay companies in carrying their own insurance from 1897 to date concerning the practicability of operating under this Law will throw considerable light on this subject, and clear up some of the points about which certain doubt appears to exist.

The fact that any product must bear the expense of accidents arising out of the manufacture thereof, places a definite responsibility on every employer to devise ways and means of avoiding such in order to secure minimum production costs. As the expense in the case of disability arising out of industrial accidents is definitely covered by this Law, any saving in accident expense must be accomplished before and not after an accident occurs. Some of the provisions of this Law may require minor changes in the future, but the silent force, backed up by public sentiment that makes it necessary for employers to accept this so-called optional law, thus placing them on a common working basis, where the prevention of accident is an economical necessity, is here to stay.

During a period of fifteen years previous to January 1st, 1912, the Semet-Solvay plant at Detroit was merely a department of the Solvay Process Company, but on that date it became an independent company. The Solvay accident policy in the period previously referred to, had been somewhat more liberal, but in many respects similar to the subsequent Compensation Law. Accident compensation amounting to one-half the regular wages earned by the injured employee at the time of the accident, and medical and surgical attention were provided the injured party at the expense of the company during the entire period of disability, and in the case of death or permanent disability arising out of an accident, some satisfactory settlement was made. The fact that during this period it was not necessary to take any case

to court, is evidence that this policy was satisfactory to our workmen.

On September 1st, 1912, the Semet-Solvay Company accepted the provisions of the Workmen's Compensation Act, and started to handle its accident cases, independently of the Solvay Process Company. The principal reasons for the latter step, were that it was decided that we could keep in closer personal touch with our employes, and could make a more detailed, scientific study of preventing accidents by so doing.

Inasmuch as predictions were heralded far and wide at the time this Law was passed that the cost of accidents cases would be materially increased, and the insurance companies changed their rates accordingly, let us consider the question of accident expense in our specific case.

In the fifteen year period previously referred to, the cost of accident compensation, medical and surgical attention and settlements in 5,700 cases was \$0.97 per \$100.00 of payroll during that period. The same item in the past year for Semet-Solvay accidents amounted to \$0.95 per \$100.00 of payroll, and by following the provisions of the Compensation Law to the letter this figure would have been reduced to \$0.67.

The thought expressed in clause (c) of Mr. Schroeder's General Comments on the law, viz., "the difficulty of obtaining immediate reports on minor accidents is an objection to the present law"; has been the basis of the only important change in our accident policy, and this change has satisfactorily solved this problem.

The policy of the Semet-Solvay Company in handling accident cases under the Michigan Workman's Compensation Law is as follows :

Instructions in English, German, Polish, Hungarian and Italian are posted in the most conspicuous places on the plant, requiring employes to report accidents to their foremen immediately, no matter how trivial such may appear to be. The foreman in turn is required to send the injured man to the Hospital immediately, where he is treated at the expense of the Company, and no deduction is made in wages for time in going to and from the Hospital.

In case the employe shows the consideration cited above, accident compensation amounting to one-half his regular wages during the entire period of disability is allowed him. In case he neglects to show the required consideration, he is held strictly to the provision of the Compensation Law which does not allow him compensation during the first two weeks of disability, but in every case his entire Hospital bill is paid by the Company. The effect of this rule has been that infection and blood poisoning in the case of minor injuries has been almost entirely eliminated, due to proper and prompt hospital treatment.

Our policy of being more liberal than required by law, is not done in a spirit of philanthropy, but because in our case we find it to be economical. In operating a coke oven plant with its by-product recovery apparatus, the greatest efficiency is obtained when the organization is composed of experienced, trained men in good mental and physical condition, and our accident policy is one of the methods used to attain such results. Most of our accidents occur from carelessness or thoughtlessness on the part of the workmen, and the development of the type of organization described above is our greatest asset in preventing accidents.

During the past year the capacity of the plant has been increased about 75% and as a result an almost complete new installation of equipment on practically the same ground area was necessary. Safeguards are considered a part of the expense of installing machinery, and such is not put in run until approved by the Safety Committee.

A resume of the accidents during the first year under the Workman's Compensation Law, which was an extremely hazardous year from an accident standpoint, shows that 23 cases were reported to the Industrial Accident Board, three major injuries resulting in disability of more than 8 weeks averaged $14\frac{1}{2}$ weeks, and 20 minor injuries extended over 2 weeks, but less than 8 averaged $2\frac{1}{2}$ weeks. The only case requiring the payment of a fixed indemnity was for the loss of the first joint of the right index finger in the case of a helper on a locomotive crane. It was not necessary to take any of the above cases

before the board of arbitration, during the first year's operation under the new law.

In conclusion, it might be stated that the successful operation of the Michigan Workman's Compensation Law is due to securing and holding the confidence of the people of the State through the merits of the Law itself and by keeping it out of politics. Despite the fact that a new governor and legislature took office shortly after this Law became effective, no changes in either the Law itself or in the personnel of the Industrial Accident Board have been made, and the powers that be are to be congratulated on their intelligent comprehension of the situation. Much of the credit for the present status of the Law is due to the insistence of the Labor Unions and Employers' Association throughout the State that no change be made, until the Law had been given a fair trial extending over a period of at least two years.

THE PRESIDENT: Gentlemen, this ends the regular discussions of this meeting. This meeting was expected to be a balanced meeting in that we expected to have a technical paper from our fellowship work, and these other papers dealing with the human relations with the general public, with employes and so forth. It has developed into a meeting that has had for its central ideas the human relations of the gas industry.

We have left a little routine business. The first is the report of the committee on time and the place of the next meeting. If the Secretary will kindly read that report.

Secretary Chamberlain then read the report as follows:

Mr. President and Gentlemen of The Michigan Gas Association:

"Your committee on place of next meeting recommends that this be held on a boat, if suitable arrangements can be made by the Executive Committee, as we understand that a year ago this Association decided to meet on a boat every alternate year, if possible. Otherwise the meeting will be held in Detroit, Michigan, at a time which does not conflict with the State Fair."

W. E. STEINWEDELL,

H. L. SCHUTT,

C. S. WRIGHT.

THE PRESIDENT: Gentlemen, what shall be done with this report of the committee?

MR. HENRY W. DOUGLAS: Mr. Chairman, I believe the suggestion was made at the meeting of the Wisconsin Association that a joint meeting with that Association might be a possibility, and I believe that such a meeting would be very desirable. I think we could combine possibly a boat trip to some of the northern resorts with a similar boat trip with the Wisconsin Association, to meet for at least one day and have part of our meeting together on the boat. We could join them at Mackinac or some similar place. I think such a plan would be worthy of consideration before we definitely decided on a boat trip for this Association.

THE PRESIDENT: Mr. Douglas, I think has expressed a very excellent idea. I don't wish to assume the position of a despot in determining the future actions of the Michigan Gas Association, but it seems to me to be very proper, following a precedent which was established several years ago, and which worked out very well, to accept the report of this committee, and put it up to the Executive Committee of this Association to carry out those ideas if feasible, but to give them power to act. That has been done once or twice heretofore, and I think it has worked successfully.

On motion of Mr. Morgan, the report was accepted and adopted.

THE PRESIDENT: That practically leaves it up to the Executive Committee. The next thing is the report of the Nominating Committee, Mr. Frazer, Chairman.

MR. FRAZER: Your Nominating Committee recommends for President, Mr. Henry W. Douglas; Vice President, Mr. Irvin Butterworth; for Secretary-Treasurer, Mr. Glenn R. Chamberlain.

The report was adopted and the Secretary was instructed to cast a ballot of the Association for the officers nominated.

THE PRESIDENT: The next matter is the report of the Committee on Resolutions, Mr. Butterworth, Chairman.

Your Committee on Final Resolutions submits the following:

"**RESOLVED**, that we place on record this expression of our feeling that this meeting of our Association has been one of the most profitable and enjoyable that it has ever held; that the papers and addresses presented have been of an unusually high order; and that we take pardonable pride in thus maintaining the high standard of the work and accomplishments of this Association, whose usefulness to the gas industry we shall strive to still further increase in the future.

"**RESOLVED**, that our membership at large duly appreciates the work done by the authors of papers, and by our officers and committees during the past year and at this meeting, in making this meeting a successful one and in maintaining the financial prosperity of our Association.

"**RESOLVED**, that we take this means and occasion of expressing our thankfulness that during the past year the ranks of our membership have not been invaded by death.

"**RESOLVED**, that notwithstanding the discouraging difficulty of educating the public in matters pertaining to our business which it would be greatly to our interest that it should know, we strongly recommend that each gas company in the State during the ensuing year give as much publicity as possible; through its local newspapers and otherwise, but especially through its *daily practice*, to the facts brought out or strongly emphasized at this meeting, especially in our President's address and in the papers of Mr. Lloyd and Mr. Tippy, that it is the sincere desire and ambition of our gas companies to fully meet their responsibilities and obligations to the communities which they serve, to still further improve their service to their consumers in every particular, and to continue to make the price of gas practically the only one of all the commodities that enter into the cost of living that shows a decrease as compared with former years, in spite of the increased cost of labor and materials."

Respectfully submitted:

IRVIN BUTTERWORTH,
E. G. PRATT, Committee.

On motion of Mr. Ewing the report was approved, accepted and adopted.

THE PRESIDENT: The next matter of business is the report of the Committee on the President's Address, Mr. Dewey, Chairman.

Report of the Committee on President's Address:

"Your committee charged with the duty of considering the President's address, and reporting to you, congratulate you that you have had the opportunity to listen to such a clear and well defined statement of the proper relations between the public and the utility companies. We recommend that each member carefully read and study the address when you have reached your home, believing that the public relations of your companies will be placed on a firmer foundation of mutuality of interests.

"The special recommendation of Mr. Blauvelt was that a committee be appointed to study and consider the proper basis of mutuality of interests between the public and the utility companies;

RESOLVED, therefore, that a committee of five be appointed by the incoming Executive Committee, and that two of the five members be W. S. Blauvelt and the President for the year 1913-1914, and that the above mentioned committee shall make a careful study and a report on the above mentioned public relations."

H. M. EATON,
R. SHACKLETTE,
V. F. DEWEY,
Committee.

On motion of Mr. Frazer the report was received, accepted and adopted.

THE PRESIDENT: There is just one more matter of business, the National Gas Congress to be held in San Francisco in 1915 has requested the Michigan Gas Association to have a

delegate appointed to represent this Association at that meeting. It has seemed to the members of the Executive Committee that it would be well for us to be represented on that occasion. I presume that there will be very little work connected with it, as Mr. Jones of San Francisco will probably have to do it all. What is your wish. Would you like to have such a delegate? If so, will you elect him from the floor or shall he be appointed by the President or by your Executive Committee? I should be glad to hear an expression of opinion from any member.

MR. A. P. EWING: What does that mean? What would it involve the Association in?

THE PRESIDENT: I presume it would involve the Association in being represented. This member would probably have his picture appear somewhere and we would like to show that the Michigan Gas Association is interested in this work.

MR. A. P. EWING: And the expense to go out there would be five hundred dollars besides the expenses there. I think that ought to be in your resolution, if you make one.

THE PRESIDENT: I presume if the delegate is to go there he would probably charge that up to his expense account of his own company, because at that time there is going to be the meeting of the American Gas Institute there and he would go in the double capacity as a member of the Gas Institute and representing the Michigan Gas Association at the Congress.

MR. HENRY W. DOUGLAS: Mr. Chairman, do I understand that this delegate is to be appointed at once? It seems a long way ahead to select a delegate to be present at that congress unless there is some work for him to do in the meantime. Later on we could probably find several men who would be glad to act as delegates and who will be there anyway, and unless it is desirable to appoint him now I should think this matter could be left open until possibly our next meeting which would be before the congress.

THE PRESIDENT: I think Mr. E. C. Jones would like to have the personnel made up at the earliest possible date, very largely for the advertising value that it is going to give the gas congress. I think that he would like the names on this list of delegates from the various associations of men who are widely known to help him make it a success. I think that there is going to be very little work for the delegates, but my understanding is that that is the real reason for wishing the delegates appointed at this early date.

MR. ERNEST F. LLOYD: I think that a matter of that sort can be better dealt with by the Executive Committee, because undoubtedly they will have to confer with any man whose name might be selected, and there are a good many things that ought to be considered that can't be in an open meeting, and I would move you that the matter be referred to the Executive Committee with power to act.

Motion seconded by Mr. Ewing and carried.

THE PRESIDENT: This concludes the business of the twenty-second annual convention. I wish to thank the members one and all for having helped to make this so successful a meeting. I bespeak for Mr. Douglas the same support next year which has been given to me this year.

Meeting adjourned.

MEMBERSHIP LIST

Michigan Gas Association

1913

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John Wyman, Gas Works Department, Detroit City Gas Company	Detroit, Mich.
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 Jacob Alter, Proprietor, Alter Light Company Chicago, Ill. |

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Franz Brzeczkowski, Vice President, Moran & Hastings Mfg. Co., 16 and 18 West Washington St.	Chicago, Ill.
Ernest B. Camberon, Traveling Salesman, H. Mueller Mfg. Company, 791 Trumbull Ave.	Detroit, Mich.
C. T. Chisholm, Traveling Representative, General Gas Light Company	Kalamazoo, Mich.
Chas. H. Claiborne, Gen'l. Sales Manager, Union Mining Company, 201 Fidelity Bldg.	Baltimore, Md.
John C. Clark, Salesman, Sprague Meter Company	Bridgeport, Conn.
W. G. Clarke, Sec'y, 101 Congress St., A. T. Knowlson Co. ..	Detroit, Mich.
J. L. Cobaugh, Salesman, Detroit Stove Works	Detroit, Mich.
D. J. Collins, Sales Agent, United Gas Improvement Co., Broad & Arch Sts.	Philadelphia, Pa.
F. V. Coolahan, Salesman, Lindsay Light Company, 161 E. Indiana St.	Detroit, Mich.
J. P. Conroy, Manager, N. Y. Branch, General Gas Light Company, 46 West Broadway	New York City
Fred G. Corbus, Welsbach Co., Broad & Arch Sts.	Philadelphia, Pa.
A. D. Cressler, President, The Kerr-Murray Co., 1368 Peoples Gas Building	Chicago, Ill.
Alfred M. Cressler, Treasurer, The Kerr-Murray Co., 1368 Peoples Gas Building	Chicago, Ill.
Geo. Cressler, Secretary, The Kerr-Murray Co., 1368 Peoples Gas Building	Chicago, Ill.
D. K. Crighton, Engineer, Gas Machinery Company	Cleveland, Ohio
J. R. Cunningham, Salesman, Am. Stove Company, 1211 Collingwood Ave.	Toledo, Ohio
F. G. Curfman, Laclede-Christy Clay Products Co.	St. Louis, Mo.
D. R. Curtenius, Gen'l. Manager, Kalamazoo Stove Co. ..	Kalamazoo, Mich.
A. H. Dane, Kalamazoo Stove Company	Kalamazoo, Mich.
F. G. Danielson, Sales Agent, The Youghiogheny & Ohio Coal Company, 801 Western Reserve Bldg.	Cleveland, Ohio
John Dell, Pres. & Gen'l. Manager, Missouri Fire Brick Company, Continental Bank Bldg.	St. Louis, Mo.
B. W. Denison, District Sales Mgr., Pittsburgh Water Heater Co., Gas Office Building	Detroit, Mich.
E. S. Dickey, Manager, Chas H. Dickey & Co.	Baltimore, Md.
Parr H. Dole, Improved Equipment Company, 60 Wall St. ..	New York City
James De Wolfe, D. S. Agent, Pittsburgh Coal Company, 1124 Majestic Building	Detroit, Mich.
Allan C. Douglas, Sales Agent, Evans & Howard Fire Brick Co.	St. Louis, Mo.
A. B. Eaton, Western Sales Agent, United Gas Improvement Co., 1519 Peoples Gas Bldg.	Chicago, Ill.
I. C. Elston, Jr., The Geist Company, 822 Ford Bldg.	Detroit, Mich.

W. R. Flattery, Salesman, Humphrey Company	Kalamazoo, Mich.
Fred W. Freese, Box 243	Fort Wayne, Ind.
F. S. Fugate, Illuminating Engineer, General Gas Light Company	Kalamazoo, Mich.
O. N. Gouldin, President, The Western Gas Construction Company	Fort Wayne, Ind.
Pay Grow, Sales Manager, Ruud Water Heater Company, 206 Jefferson Ave.	Detroit, Mich.
W. S. Guiteau, Salesman, Lloyd Construction Company, 860 Greenwood Ave.	Detroit, Mich.
Wm. W. Hackney, Western Gas Construction Company ..	Fort Wayne, Ind.
F. N. Hamerstrom, Com'l Manager, Welsbach Company ..	Gloucester, N. J.
L. C. Hamlink, Vice-President, The Gas Machinery Co., 715 Citizens Bldg.	Cleveland, Ohio
B. S. Hammill, Manager, B. Nicoll & Company, Gen'l Sales Agents, Pittsburgh Terminal Railroad & Coal Co., Wabash Bldg., Pittsburgh, Pa.	
Chas. Herbison, Salesman, Remor Mfg. Co.	Mercer, Pa.
H. D. Harper, Manager, American Meter Co., 98 So. Jefferson St.	Chicago, Ill.
DeWitt C. Harr, Estate Stove Co., 2100 Lincoln Place No. 6 ..	Chicago, Ill.
H. H. Hegeman, The Kelly & Jones Co., 155 North Clark St. ..	Chicago, Ill.
John G. Hester, c-o Semet-Solvay Company	Detroit, Mich.
J. B. Higgins, Salesman, The Tungstoller Co.	Cleveland, Ohio
Jules G. Hoffman, Hammond Bldg.	Detroit, Mich.
J. C. Holderness, Asst. Sec'y. Eclipse Gas Stove Co.	Rockford, Ill.
E. H. Hopkins, Ohio Gas Meter Company	Cleveland, Ohio
A. H. Humphrey, President General Gas Light Company, Kalamazoo, Mich.	
Herbert S. Humphrey, Manufacturer, Humphrey Company, Kalamazoo, Mich.	
John Jennings, Salesman, Welsbach Company	Chicago, Ill.
O. E. Jennings, Representative, Michigan Stove Co.	Detroit, Mich.
Benj. J. Kellum, Manager, Welsbach Company, Wabash Ave., Chicago, Ill.	
Fenton P. Kelsey, Editor, Gas Record, Monadnock Block	Chicago, Ill.
A. T. Knowlson, 101 Congress St.	Detroit, Mich.
A. M. Lally, Manager Sales, National Tube Company, 1608 Frick Bldg.	Pittsburgh, Pa.
F. R. Lawrence, Salesman, Rathbone, Sard & Co.	Aurora, Ill.
Henry I. Lea, Gas Engineer, 616 Peoples Gas Bldg.	Chicago, Ill.
Nathan G. Leaky, Asst. Sec'y. Michigan Ammonia Works ...	Detroit, Mich.
E. E. Ledbetter, Manager, Detroit Branch, Humphrey Co., 46 W. Grand River Ave.	Detroit, Mich.
Gabriel B. Levy, Brandt-Dent Co.	Watertown, Wis.
Archibald S. B. Little, Gen'l. Manager, Consolidated Gas Purification & Chemical Co.	Nashville, Tenn.
A. G. Lloyd, Vice-President, Lloyd Construction Co., 860 Greenwood Ave.	Detroit, Mich.
E. F. Lloyd, President, Lloyd Construction Company, 860 Greenwood Ave.	Detroit, Mich.
Howard Lyon, Welsbach Company	Gloucester, N. J.
W. J. McCartney, Salesman, General Gas Light Co.	Kalamazoo, Mich.
W. N. McIlravy, Manager Barrett Mfg. Co., 17 Battery Place, New York City	
Garnet W. McKee, Manager, Eclipse Fuel Engineering Co.,.. Rockford, Ill.	
Norman Macbeth, Editor Lighting Journal, 50 Church St., New York City	
Edward M. Mancourt, Western Manager, The Consolidated Coal Co. 1620 Ford Bldg.	Detroit, Mich.
Alphonso Mason, Welsbach Company	Gloucester, N. J.
C. T. Mason, Geo. M. Clark Stove Co., 317 Henry Ave., S. E.	Grand Rapids, Mich.
Robt. Merke, Salesman, Trenkamp Stove & Mfg. Co.	Cleveland, Ohio
Lee B. Mettler, Western Sales Mgr., Pittsburg Water Heater Co., 1105 Peoples Gas Building	Chicago, Ill.

Thos. D. Miller, Spec. Representative, The Consolidation Coal Co., Fisher Bldg.	Chicago, Ill.
A. F. Milliken, Sales Manager, Geo. M. Clark & Co., 82 Michigan Ave.	Chicago, Ill.
Chas. S. Mode, Salesman, Alter Light Company, 40-42 Franklin St.	Chicago, Ill.
T. J. Moran, Salesman, A. B. Stove Company	Battle Creek, Mich.
Chas. E. Mueller, Sales Dept., Hays Mfg. Co.	Erie, Pa.
H. J. Nicholson, 2nd Vice-President, Ruud Mfg. Co.	Pittsburg, Pa.
Geo. Osius, Sec'y and Treas., Michigan Ammonia Works	Detroit, Mich.
Geo. W. Parker, Eastern Sales Agent, Parker Russell Mining & Mfg. Co., 45 Broadway	New York City
John F. Parker, Salesman, Eclipse Gas Stove Co.	Rockford, Ill.
R. F. Pierce, Ill. Engineer, Welsbach Co.	Gloucester, N. J.
Roger W. Polk, Laclede Christy Clay Products Co.	St. Louis, Mo.
E. G. Pond, Salesman, Ideal Mfg. Co., 424 Canfield Ave.	Detroit, Mich.
J. L. Potter, Treasurer, The Fuller-Warren Company	Milwaukee, Wis.
Chas. H. Printz, Gen'l. Sales Agent Stacey Mfg. Co.	Cincinnati, Ohio
Geo. F. Pulford, Salesman, American Car & Foundry Company	Detroit, Mich.
W. C. Quinn, Salesman, Rathbone, Sard & Co.	Aurora, Ill.
M. G. Reynolds, Pres., Reynolds Gas Regulator Co.	Anderson, Ind.
A. J. Robus, Engineer, Evans & Howard Fire Brick Co., 920 Market St.	St. Louis, Mo.
D. R. Russell, President, Parker-Russell Mining & Mfg. Co., 501 Liggett Bldg.	St. Louis, Mo.
Murray W. Sales, Murray W. Sales Co., 76 Jefferson Ave.	Detroit, Mich.
J. D. Sayer, Engineer, Improved Equipment Company, 60 Wall Street	New York City
H. D. Schall, Gen'l. Sales Manager, Detroit Stove Works	Detroit, Mich.
Chas. C. Schneider, Manager, Detroit Office, Pittsburgh Lamp, Brass & Glass Co., 68 Griswold St.	Detroit, Mich.
H. L. Schutt, Salesman, Wm. M. Crane Co., 32 Linden Ave.	Buffalo, N. Y.
Herbert Senger, Salesman, Consolidated Gas Purification & Chemical Co., 101 Park Ave.	New York City, N. Y.
Wm. Seymour, Sault Ste. Marie	Ontario, Canada
Arthur M. Smith, Gas Machinery Co., 715 Citizens Bldg.	Cleveland, Ohio
Chas. S. Smith, Salesman, Ringen Stove Co.	St. Louis, Mo.
Ford S. Smith, Treas., Smith Chandelier Co., No. 2665 E. Grand Blvd.	Detroit, Mich.
T. J. Smith, Jr., Salesman, Pittsburg Water Heater Co.	Pittsburg, Pa.
Arthur Smyly, Western Manager, Connelly Iron Sponge & Gov. Co., 22nd and Morgan Sts.	Chicago, Ill.
Andrew J. Stacey, G. S. A., Stacey Mfg. Co.	Cincinnati, Ohio
Edw. W. Steinmueller, Western Gas Construction Company	Fort Wayne, Ind.
W. E. Steinwedell, Sec'y, Gas Machinery Co., 719 Citizens Bldg.	Cleveland, Ohio
Chester N. Stevens, Asst. Manager Barrett Mfg. Company, 1200 Otis Building	Chicago, Ill.
F. E. Stevens, Pres., The Corbett-Stevens Co., 1107 Harrison Bldg.	Columbus, Ohio
J. R. Strain, Michigan Stove Company	Chicago, Ill.
L. J. Strause, President, Strause Gas Iron Co., 1423 Vine St., Philadelphia, Pa.	
Wm. P. Swarts, Salesman, A. T. Knowlson Co., 101 Congress St.	Detroit, Mich.
Harry Swindell, Salesman, Holophane Co.	Newark, Ohio
Frank Toupalick, Sales Manager, Art Stove Company	Detroit, Mich.
S. L. VanNoorden, State Representative, Jas. B. Clow & Sons, 342-358 Franklin St.	Chicago, Ill.
B. G. VanWie, Gen'l. Supt., Detroit Stove Works	Detroit, Mich.
Chas. W. Wardell, Illuminating Engineer, Welsbach Co.	Gloucester, N. J.

W. F. Weadley, Sales Manager, General Gas Light Co., Kalamazoo, Mich.
John A. Weston, Detroit Stove Works, 412 Walnut St. Lansing, Mich.
Leigh Wickham, Salesman, Parker Russell Mining & Mfg. Co., St. Louis, Mo.
J. Wysocki, President, Aurora Mantle & Lamp Co. Aurora, Ill.
L. B. Young, Sales Manager, Michigan Stove Works Detroit, Mich.
A. L. Zwisler, President, American Gas Light Co. Kalamazoo, Mich.

CONSTITUTION
of the
Michigan Gas Association

I.

NAME.

1. The name of this Association shall be The Michigan Gas Association.

II.

OBJECTS.

2. The object of this Association shall be the promotion and advancement of knowledge, scientific and practical, in all matters relating to the construction and management of gas works, and the manufacture, distribution and consumption of gas.

3. The establishment and maintenance of a spirit of fraternity between the members of the Association, by social intercourse, and by friendly exchange of information and ideas on the before-mentioned subject matters.

4. The inducement and extension of more cordial and friendly relations between the manufacturers of gas and their patrons, based upon mutuality of interests.

III.

MEMBERS.

5. The members of this Association shall consist of three classes—active, associate and honorary members.

6. To be eligible for active membership, a person must be an officer or an employe of a gas company.

6a. Any person directly or indirectly connected with the management of gas works, of gas machinery, or who may be skilled therein, shall be eligible as an associate member of this Association. Such members shall be proposed, balloted for and received in the same manner and be subject to the same fees and annual dues, as active members, and shall be entitled to all the privileges and courtesies of the Association, except the right to vote, hold office, or participate in the management of its business affairs.

7. Honorary members shall be gentlemen whose scientific or practical knowledge in matters relating to the gas industry, and whose efforts and interests in behalf of said industry shall recommend them to the Association.

8. Every application for active and associate membership shall be made in writing to the Secretary, indorsed by two active members, and must contain an agreement of the applicant to comply with the requirements of the constitution if elected. The application shall be referred to the executive committee, and, if approved by them, shall be submitted to the Association for action, and the votes of two-thirds of the members present shall be necessary to an election. If any applicant fails of election no notice of his application shall be made in the minutes.

9. Honorary members shall be proposed by the executive committee, at a general meeting of the Association.

10. Active and associate members shall pay an initiation fee of three dollars (\$3), which shall include one year's dues, at the meeting at which they are elected, and dues thereafter in the sum of three dollars (\$3) annually, which shall be paid in advance.

11. Any member may retire from membership by giving written notice to that effect to the Secretary, and by paying all annual dues to that date, unless released from said payment by a vote of the executive committee. Any member whose dues shall

remain unpaid for a term of three years may be dropped from the roll of membership by a vote of the executive committee.

12. A member dropped from the roll for the non-payment of dues may, upon paying the amount he owes the Association, be reinstated at the option of the executive committee.

13. Honorary members shall not be required to make any payments or contributions to the Association. They shall be entitled to all the privileges of the Association except voting, holding office and attendance on executive session of the Association.

14. A member may be expelled from the Association by a report and motion to that effect made by the executive committee at any general meeting of the Association; the vote shall be by ballot, and shall require two-thirds of the votes cast for its adoption.

IV.

MANAGEMENT.

15. The affairs of the Association shall be managed by the executive committee, subject to the control of the Association by its action in general meetings. It shall be composed of the President, Vice-President and the President for the preceding year. All questions before the executive committee shall be decided by a majority vote. The executive committee shall have power to fill vacancies in its own body.

16. Previous to each annual meeting, the executive committee shall appoint a nominating committee, none of whom shall be members of the executive committee. The nominating committee shall, at the annual meeting, present a list of officers whom they recommend for election for the ensuing year.

V.

OFFICERS.

17. The officers shall consist of a President, Vice-President, Secretary and Treasurer, who shall be elected annually by ballot and assume office on the first day of the month next following

their election. One person may be elected to the offices of both Secretary and Treasurer, and if so shall receive \$100.00 per year salary. (Amended Sept. 1909, to \$300.00 per year.)

18. The President, or in his absence, the Vice-President, shall preside at all meetings of the Association, or of committees, at which he is present. He may call meetings of the officers or committees whenever he deems it advisable to do so; and he shall be required to call a meeting of the executive committee on the written request of three members of the Association.

19. The Secretary shall take minutes of all proceedings of the Association and of the executive committee, and enter them in the proper books for the purpose. He shall conduct the correspondence of the Association; read minutes and notices of all meetings, and also papers and communications, if the authors wish it; collect all dues and initiation fees; and perform whatever other duties may be required by this constitution pertaining to his office.

20. The Secretary shall send notices to all members of the Association at least fourteen days before each general meeting, mentioning the papers to be read, and any special business to be brought before the meeting.

21. The Treasurer shall receive and safely keep all initiation fees, dues and funds of the Association; shall keep correct accounts of the same, and pay all bills approved by the President or a member of the executive committee and he shall make an annual report to be submitted to the Association.

VI.

MEETINGS AND PROCEEDINGS.

22. The annual meeting of the Association shall be held on the third Wednesday, Thursday and Friday after the first Monday in September of each year, at such place as shall be designated at the preceding annual meeting. Special meetings and executive sessions may be called at the option of the executive committee.

22a. By a majority vote of the executive committee, a vote of the Association may be taken by mail, and the Secretary is hereby authorized to enter the result of said vote upon his journal as the decision of the Association upon the subject voted upon.

23. At the annual meetings of the Association the order of business shall be:

1. Roll call.
2. The reading of the minutes of last meeting, if called for.
3. The report of the executive committee.
4. The reports of the Secretary and Treasurer.
5. The reports of special committees.
6. The address of the President.
7. The reading of papers and discussion of same.
8. The election of officers.
9. General business.

24. At other general meetings of the Association the order of business shall be the same except as to the 4th and 8th clauses.

25. All ordinary questions shall be decided by any convenient system of open voting; and seven members shall constitute a quorum.

26. Questions of a special nature shall be decided by ballot.

27. All papers read at the meetings of the Association must relate to matters either directly or indirectly connected with the objects of the Association and must be approved by the executive committee before being read.

28. All papers, drawings, or models submitted to the meeting of the Association shall be and remain the property of the authors.

VII.

AMENDMENTS.

29. All propositions for adding to, or altering any of the provisions of the foregoing constitution, shall be laid before the

executive committee, who may bring them before the next general meeting of the Association if they see fit; and such committee shall be bound to do so on the requisition, in writing, of any five members of the Association. All proposed amendments or additions to the constitution shall be presented by the executive committee in their regular report to the Association during the first session of any regular meeting; and the voting upon their adoption shall be made the first order of business for the second session of the meeting. Such propositions shall be decided by ballot, and shall require two-thirds of the votes cast for their adoption.

VIII.

RULES OF ORDER.

30. Cushing's Manual shall govern in all cases and questions not already provided for in this constitution.

UNIVERSITY OF MICHIGAN



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